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ABSTRACT

This volume examines teacher education in countries having vigorous reform movements, along with their potential to influence other countries. The issue of teacher education in liberal and people's democracies as well as in industrial and developing countries is studied. Attention is called to such topics as aims and content of teacher education; the selection, retention, and certification of teachers; the organization, administration, and control of teacher education; and the social and intellectual characteristics of teachers and teacher educators. Following an introduction by the editor, the book is organized into two parts, each consisting of three chapters. Part 1, entitled "Teacher Education in Liberal Democracies," includes: "The Education of Teachers in England and Wales" (Harry Judge); "The Education of Japanese Teachers: Lessons for the United States?" (Willis D. Hawley); and "Research and Teacher Education in the American University" (Marvin Lazerson). The second part, "Teacher Education in Peoples' Democracies," incorporates "Teacher Education in the Soviet Union: Processes and Problems in the Context of Perestroika" (Valeri M. Pivavarov); "Teacher Education in Revolutionary Nicaragua" (Robert F. Arnove and Anthony Dewees); and "Teacher Education in the People's Republic of China" (Lynn Paine). (LL)

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FIT TO TEACH:

Teacher Education

in International

Perspective

Volume 8
Center for Cross-cultural Education Lecture Series

Edited by
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FIT TO TEACH:
Teacher Education in International Perspective

EDGAR B. GUMBERT is professor of educational foundations at Georgia State University. He established the Center for Cross-cultural Education in the College of Education in 1980. He is the coauthor of *The Superschool and the Superstate: American Education in the Twentieth Century, 1919–1970*, and the author of articles, essays, and reviews in a variety of journals and periodicals in the United States and Europe.

Introduction

EDGAR B. GUMBERT

The chapter by Marvin Lazerson in this volume is a version of a lecture he gave at Georgia State University in October 1988 as part of the eighth annual Visiting Scholar Lecture Series sponsored by the Center for Cross-cultural Education and the College of Education. The other chapters were prepared expressly for this volume. Although the Lazerson chapter is in a different register from the others, it is included because it treats insightfully an important facet of teacher education.

The contributors were asked to examine teacher education in selected countries. The topic was suggested by the findings in the Lecture Series on politics and educational reform (Volume 7), which linked the success of the reform movements in several countries to changes in teacher education and in the quality, status, and working conditions of teachers.

The countries were selected because of the vigor of their reform movements and their potential influence on other countries. Moreover, together they make it possible to study the single issue of teacher education in liberal and peoples' democracies as well as in industrial and developing countries.

The authors were selected because they are prominent scholars who have had extensive professional involvement in teacher education and considerable experience in the countries about which they write. To assure common features in the chapters, they were provided with a *Guide* calling attention to such topics as the aims and content of teacher education; the selection, retention, and certification of teachers;

the organization, administration, and control of teacher education; and the social and intellectual characteristics of teachers and teacher educators. However, it will be readily apparent to the reader that they had wide latitude to interpret and shape their material as they saw fit.

As difficult as it is to say something novel about teachers and teaching, the contributors successfully convey the several social and individual goals of teaching as well as the moral, political, and practical dilemmas that accompany it. They provide a vivid cross-national picture of teachers' social origins, their training, their political and economic roles, their self-esteem, their values, their view of their profession, and the ways they get promoted and regard their duties. Richly detailed, the authors' studies show the multiple ideas and the historical and current realities behind what it means to be a teacher.

Part I: Teacher Education in Liberal Democracies

HARRY JUDGE is author of *Louis XIV; School is Not Yet Dead; American Graduate Schools of Education: A View From Abroad; A Generation of Schooling: English Secondary Schools Since 1944*; and of several chapters of books.

His numerous articles and reviews on educational and historical subjects have appeared in a variety of journals and periodicals in England and the United States.

The director of the University of Oxford Department of Educational Studies from 1973 to 1988, Dr. Judge has also been a visiting professor at Massachusetts Institute of Technology, Carnegie-Mellon University, Harvard University, and the University of Virginia. He is currently Fellow of Brasenose College, Oxford, and professor of Teacher Education Policy at Michigan State University.

The Education of Teachers in England and Wales

HARRY JUDGE

The education and training of teachers are at the very heart of the current reform of British education and exemplify the paradoxes and tensions contained within the reform. It is an international truism that successful change in education depends on the active cooperation of talented and committed teachers. For that plain reason, unless able people become teachers and commit themselves wholeheartedly to the improvement of schooling, the Education Act for England and Wales of 1988 will remain a piece of aspirational legislation and nothing more. At the same time, the spirit of that deeply significant Act of Parliament is imbued with a distrust of professional autonomy, with a historic commitment to regulation and curriculum prescription, and with a determination to subordinate teachers to appraisal and lay management. Within this context the first paradox, reflected in the contrived antithesis between teacher education and teacher training, becomes clear: Teacher education needs to attract a large, and indeed growing, proportion of the more enterprising products of higher education; yet teacher training needs to prepare a workforce of limited autonomy and ambition in order to achieve externally determined objectives.[1]

The second paradox is more precise: The intervention of the national government in London in curriculum strategy for primary and secondary schools places that government,

whatever its political complexion, in a novel and delicate position. The very same government that now proposes to regulate what must be taught and in what amounts has the parallel responsibility for ensuring that a sufficient supply of appropriately trained teachers is delivered in order to meet those statutory requirements. If more mathematics and science and foreign languages are now to be taught by government order, then that same government must be accountable for delivering the teachers through the higher education system that it also now controls. In the past, this responsibility was much weaker, since the local and school authorities responsible for defining the balance and content of the curriculum could always be relied on pragmatically to adapt that curriculum to the teaching force available at any time. This often hazardous flexibility will now be lost, and the pressures on central government to intervene powerfully in the mechanisms that control the supply of teachers through higher education will be irresistible. And those pressures will come to bear most strongly in the mid-1990s at precisely the moment when, for demographic reasons, the supply of teachers will be most at risk. Government will therefore be seductively tempted to relax the standards of teacher recruitment and preparation at the very time its own efforts to make those standards more rigorous will be at their peak. These are the forces that will combine to distort the reformed patterns of teacher education now emerging from the dramatic events of the past twenty years (as will be further argued in the final section of this chapter).

The teaching force in Britain represents a massive educational investment and is therefore certain to attract continuing and often unfriendly public attention. Although its size, at about 440,000, has shrunk a little in recent years, the salary bill for those teachers represents some 70 percent of the annual current cost of primary and secondary schools. The critical task for the rest of this century will be to match the output of the teacher education system (or systems) to the needs of those schools, as well as to retrain the teachers already working in them. It is precisely that matching of

the structures of teacher education with those of the schools that has been so difficult to achieve for much of this century; indeed, the match has probably never been so neatly symmetrical as it was during the nineteenth century. The structures of both teacher education and schooling have been continuously modified during the twentieth century, but the modifications have been imperfectly integrated. More particularly, there has been a significant and dangerous lag between the introduction of changes in patterns of schooling and appropriate adjustments in those of teacher preparation; this lag does much to explain both the continuing sense of unease and disorder in teacher education and the predictably imperfect outcomes of many efforts at school reform.

The current state of teacher education can therefore best be explored through its predicted future and its recorded past. Current developments, and their likely outcomes, will bring new pressures to bear on teacher education and so reveal much of its true nature. A greater measure of governmental responsibility for the content of teaching will increase the need for planning as teachers will need to be produced, and be shown to exist, if a national curriculum is to be delivered. In the mid-1990s a highly probable shortage of adequately qualified recruits to teacher education will bring severe pressures to bear on the undoubted determination of the national government to preserve high standards in the recruitment of teachers. The pressures for higher standards, for matching the curriculum needs of schools, and for finding enough teachers of any kind will interact and conflict. A new urgency will thus be given to the antique problem of maintaining an effective relationship between the structures of teacher education and of schooling. In the course of its complex development, that relationship has moved through three phases, labeled in this chapter *elitist*, *comprehensive*, and *efficient*. In each of those phases principal themes have recurred and interacted with one another, and these in their turn are characterized as *content*, *location*, and *control*. Issues of content concern primarily what is taught to students in teacher education and, in particular, the balance between academic studies and practical or pro-

fessional work. Issues of location concern, of course, the relationship of teacher education to the mainstream of higher education, epitomized by the university, and to the so-called lower schools. Issues of control obviously relate to the powers and responsibilities of central government, of the religious and voluntary bodies as the historic providers of much of teacher education, and of local governments as the principal employers of teachers and the providers of most of the non-university institutions of teacher education, although not for very much longer. The themes resonate through all three historical phases, and the argument in the rest of the chapter may best be introduced by a simple grid (see Exhibit 1).

Exhibit 1. **Grid Showing Historical Themes in Education**

	ELITIST	COMPREHENSIVE	EFFICIENT	
Content				1
Location				2
Control				3
	A	B	C	

The Elitist Phase

Teacher education in England and Wales is a product of history rather than of logic, although much has been achieved in the past twenty years to give it more shape and coherence. Although it is now in consequence more of "a system" than ever before, it is still marked by curious inherited divisions, both between curricular patterns of teacher education and underlying ideologies and between types of institutions. These divisions were created in the nineteenth century and can only be understood in that historical context. They are not without analogies elsewhere in Europe, but stand in marked contrast to the present situation in the United States. They are rooted in patterns of schooling, specifically in the sharp distinction throughout the last century and well into this between public elementary education on the one hand and secondary education provided only for a privileged minority on the other. Serious and vocational teacher education was long confined to the preparation of teachers for public elementary schools.[2]

Until 1870 those schools were provided exclusively by voluntary religious bodies, albeit with a growing measure of support and intervention from the state. Many of the teachers in them were in no sense qualified or licensed, but both the providers of the schools and the state as the source of finance had an obvious interest in raising the standards of teaching. This was attempted by an array of measures, including financial incentives for teachers who chose to seek certification, and the control of the process of certification by public examinations and by the monitoring functions of Her Majesty's Inspectors (HMIs). Throughout the second half of the century the main source of teachers was the pool of pupil teachers, who, in return for modest payments and some free tuition, worked as apprentices to more experienced practitioners. Such teacher training as existed was therefore undertaken for the most part within the culture of the elementary schools themselves, and for the majority that was for long generally deemed to be sufficient.

For a minority of the more able and determined teachers, post-school training was provided through one- or two-year courses in the handful of training colleges that the religious bodies had provided for their own teachers, again with varying measures of state support justifying government intervention in their management. By mid-century a score of such colleges existed. Those pupil teachers who did not secure scholarships to them could nevertheless continue to teach as uncertificated teachers or submit themselves, without having attended a training college, to the national examination provided by the government as the one gate to certificated status. These colleges owed much to Scottish and continental examples and became both more significant and, given their monopoly, more anomalous after the introduction to England and Wales in 1870 of secular public elementary schools under the control of elected school boards.[3] With the important exception noted below, there was no secular alternative to these denominational colleges, which depended for their survival upon both financial support from the government and a supply of students from the pool of pupil teachers. By 1900 there was only one certificated teacher for each 75 pupils and only one trained teacher—that is one who had attended a college—for each 128 pupils. Moreover the pupil teachers themselves provided a significant direct contribution to the workforce: In 1902, of 139,818 teachers in service in elementary schools, 30,785 were pupil teachers.

From the beginning of this century, the public local education authorities were encouraged to build their own teacher training colleges, although only a score of such institutions had been established before 1914. Public and political pressures on an untidy system became stronger, and opposition to the pupil teacher system more articulate. The minimum age for admission to pupilage was raised, and the roots of teacher training in the elementary school weakened. Scholarships were provided for intending teachers willing to stay in secondary schools, and teacher education took a further step toward what was later to be defined

as higher education. By 1914, most of the pupil teachers had disappeared, and most intending teachers began their professional training after leaving secondary school (or its equivalent) in one of the colleges. Those colleges, while not neglecting vocational concerns, were often marked by a strong academic bias in their curriculum, and many students in them sought to combine their regular program with contemporaneous study on university courses. Public authorities generally resisted this tendency by withdrawing recognition from colleges that allowed students to combine a two- or three-year course with work for a university degree. But it was a long time before attendance at a college, and subsequent success in an examination, became a necessary condition for employment as a teacher. As late as 1926 there was one uncertificated teacher for three that were certificated, and in many rural areas the numbers were equal.

The training of elementary teachers was therefore an important item on the policy agenda; not until very much later was that true for secondary school teachers. Even after the spread of public secondary schools in the early years of this century, the possession of a university degree was thought to be a sufficient guarantee of competence as a teacher. Indeed, such legal provisions survived into the 1970s, and the attitudes underlying them, still longer than that. The universities became involved in teacher training almost by accident. In the late nineteenth century all the training colleges were religious establishments, and this monopoly was offensive to many people. Several universities therefore gladly accepted the government's invitation to establish what were known as day training colleges to provide a secular alternative to the conventional residential colleges for elementary teachers. Sixteen such colleges existed at the turn of the century. Their contribution to the training of elementary teachers represented nearly one-quarter of the total provision. Some of them quietly developed secondary departments, which responded in time to the general view among the associations of secondary teachers that the appropriate pattern of education and training for their mem-

bers should be a bachelor's degree followed by a one-year university-based professional course. Early in this century this became the norm for those graduates who attached importance to formal training. The average annual number in this category for the whole country in the years before World War I was only 200, and of these 160 were women. In 1938, only 60 percent of the male university graduates teaching in secondary schools had received this or any other kind of formal professional training; even in the 1960s, and until such training was made compulsory, nearly half of all university graduates going into teaching received no kind of professional training in education.

The universities therefore became the home of a particular kind of teacher training, possibly well-adapted to the particular needs of secondary schools; and, partly because they successfully insisted on a four-year course as a minimum if a degree and professional training were both to be achieved, they were distanced from the larger but less prestigious task of preparing elementary school teachers. The teacher training colleges outside the universities became the home of the two-year course, often uneasily combining academic and professional work. Teacher training gradually became the normal requirement for elementary school teachers, but not for their secondary cousins. Management of the training colleges, now separated from the structures of elementary and secondary schooling but still distanced from the universities, was exercised by the local education and denominational authorities. Central government exercised a tight control over the logistics and curriculum and examinations of the colleges. The universities also depended on the central government for recognition, but thereafter, strengthened by the voluntary nature of the training provided, enjoyed a considerable measure of autonomy, conferring their own diplomas as alternatives to the state certification examination. Between the two World Wars an attempt was made, which proved to be largely symbolic, to draw the two separate sectors a little closer together by establishing joint boards to conduct the examinations for teacher candidates in the training colleges, and so limit the

influence of government upon the content of courses. But at the end of the elitist phase, marked roughly by the passing of the great Education Act of 1944, a very sharp dichotomy had been established between voluntary training within the universities for the academic secondary schools and an effectively compulsory one within the teacher colleges for the elementary sector. These divisions still have fundamental importance, and the comments made in this section on content, location, and control can now be related to the grid on Exhibit 1.

The Comprehensive Phase

There are two reasons for attaching to the second major phase in the development of British teacher education—from 1944 to 1972—the convenient label of comprehensive. The key to understanding the purposes and structure of teacher education—and not in Britain alone—lies in the relationship between the schools and the activities of teacher education itself. During the years under review, the structure of British schooling changed dramatically: First, by the introduction after 1944 of universal secondary education, albeit of a bipartite variety; and second, by the acceleration during the 1960s toward the introduction of the comprehensive secondary school designed to incorporate the academic and general secondary schools that had preceded it.[4] The symmetrical relationship between a dual system of teacher education and a dual system of schooling was destroyed, but the necessary adjustments to the former were made only slowly and painfully. Meanwhile, the national system was becoming more comprehensive in yet another sense as efforts were redoubled to bring the untidy work of teacher education firmly and unambiguously within the mainstream of higher education.

Major changes were outlined in the year of the 1944 Act. From an early date only Qualified Teachers (the new technical term) were to be employed, and qualification would depend on attending an approved course of training—except for university graduates. The gates seemed to be closing

on an emerging unified profession. A new relationship was attempted between the universities and the teacher training colleges through regional forms of organization, which assumed responsibility—not always exercised with firmness and imagination—for the procedures leading to Qualified Teacher status, for the courses of study in the colleges, and for examinations. In principle, the central government had yielded a great deal of its historic control; even in practice the system became a great deal more liberal and decentralized than it had been, or was again to become. The legal minimum school-leaving age was raised twice in these years and contributed, along with the successful demands for smaller classes, to an impressive increase in the number of teacher training places and institutions, as well as in their size and effectiveness. The output from the training colleges in 1939 had been 6,000; by the early 1970s, when the peak was reached, it was 40,000. Even so, the length of the course had been extended from two to three years at the beginning of the 1960s, and by the end of that decade some 10 percent of all students were completing a fourth year in order to qualify for the newly introduced Bachelor of Education (B.Ed.) degree.

The teacher training colleges therefore came to resemble more closely other establishments of higher education. Not only were their courses of study more academically serious, but there was a marked shift toward laicization; this had taken place rapidly after 1944. In 1939 there had been 63 voluntary (mostly denominational) colleges and only 28 maintained by the local education authorities; by 1951 the former category had shrunk to 56, while the latter mushroomed to 76. The teacher colleges were shortly to acquire a greater measure of responsibility for their own affairs through the reconstitution of governing bodies and the representation of faculty members on them. The universities themselves preserved their interest in the one-year course of training for graduates, which was not made compulsory until the early 1970s—and even then with significant loopholes.

These years were also marked by expansion and diversification within higher education as a whole. University teacher training related only to the academic secondary grammar and independent schools and existed comfortably alongside, albeit at a considerable distance from, teacher training in the colleges designed to meet the needs of a separate elementary school system. But already in the 1960s the universities had ceased to be the only nationally recognized establishments of higher education; alongside them grew, with government encouragement, the 30 polytechnics, indistinguishable in many ways from the universities, although subject—as they now no longer are—to control by local government.[5] A straightforward marriage between universities and colleges of education, although ardently desired by many reformers, had not proved possible to achieve; too many issues of power, prestige, and finance were involved. But a higher education "family," which now included polytechnics and some new colleges of higher education alongside the older universities, would need to clarify its relationship with a teacher training college system marked by increasing ambiguities of purpose and status. That status had itself been subtly modified in the mid-1960s by a simple and inexpensive change of title from training college to college of education.[6]

The James Committee on Teacher Education and Training, appointed by Margaret Thatcher in 1971 when she was Secretary of State for Education and Science, therefore faced a rich crop of problems and questions. Changes in the school system meant that the machinery of teacher training was now badly out of line with it. Teachers could no longer be professionally classified as being concerned only with younger or less academically talented pupils, or vice versa. The college of education system had come to maturity in terms of size and the length of the courses offered. But its relationship to higher education as a whole remained uncertain and uncomfortable. Moreover, the startling growth of the past decade had inevitably raised problems of quality and stability. Perhaps most serious of all, the quest for aca-

demic respectability—associated in part with the lengthening of the course, and more directly with the B.Ed. degree—was believed to have generated a neglect of professional concerns and an insensitivity to the real needs of schools and of intending classroom teachers. It was objected, in terms reminiscent of the early 1900s, that the colleges of education were unduly preoccupied with conventional university standards of subject mastery and scholarship and, to make things worse, that the professional study of education had itself been etherealized. These years were the hey-day of the study of four disciplines of education: Sociology, psychology, philosophy, and history.

Many of these anxieties were doubtless misplaced or exaggerated, but the structural problems underlying the polemic were real enough. The solutions proposed by the James Committee—which, although not formally adopted, have in my opinion influenced the evolution of the present arrangements—were integrated by an effort to dignify and clarify the term *professional*. For that reason, the strongest emphasis was placed on the professional development of the teacher in service through a range of educational and training activities. The formal distinction between concurrent (as in the colleges) and consecutive (as in the universities) forms of teacher education was rejected as unhelpful. According to the Committee all intending teachers should first complete a well-planned phase of higher education (the so-called first cycle) before proceeding to a second and sharply professional cycle of teacher preparation, sited partly in higher education and partly in real schools. The degree to be awarded after these two stages was to be a B.A.(Ed.), and was conceived as being a degree in teaching rather than in a subject called education. The intent of many of these recommendations was to imply a flattering analogy with the professional and practical education offered (or so it is still fashionable to suppose) in medicine. The dependent relationship of the colleges on the universities was to be terminated, and in effect a third sector of higher education would be created, based in large measure on the existing colleges, many of which would wish to diversify their pro-

grams of study. The Committee was skeptical of the advantages of teachers being educated in relative isolation from the rest of their contemporaries.[7]

The 1972 Report conveniently marks the transition from the comprehensive to the efficient phase. The phase which it concluded was marked, in terms of the explanatory grid, by a shift in content toward academic values and purposes, against which there was then a strong reaction. As for location, attempts to incorporate the colleges within the university sector were unsuccessful, but the growth of higher education itself opened up new possibilities for the future. As for control, central government preserved tight management of the funding and logistics of the system, while relinquishing much of the professional and academic responsibility for it. These very themes were to be given a new importance, and in some ways new definitions, in the succeeding (that is, contemporary) phase, which has been dominated by an unexpectedly abrupt decline in the number of places required for teacher training. That decline, coupled with a new and vigorous determination by government to reassert control of the values as well as the mechanics of the system, explains much in the present British pattern.[8]

The Efficient Phase

The mid-1970s mark a watershed in the history of education in Britain. Labor Prime Minister James Callaghan's speech at Ruskin College, Oxford, in October 1976 was widely and correctly perceived as a forceful attempt to break away from many of the conventions of the past. According to Callaghan, standards were not high enough; the basics were being neglected; the educating professions had not been sensitive to public and parental anxieties; the needs of industry had been neglected; central government had not given a decisive lead, and a great debate was needed. In spite of the contemporary disclaimers, it was clear that government proposed to intervene much more directly in the design and delivery of the school curriculum. The momentum in that

direction was accelerated by the Conservative Party victory in the general election of 1979, and was consolidated in the elections of 1983 and, even more clearly, of 1987. There were, of course, profoundly important shifts of emphasis as result of these Conservative victories—notably in the attack on the powers of local education authorities, the new powers to be given to parents as consumers, and the accompanying stress on privatization—but there is now a well-established consensus in the corridors of power that more intervention is required, at least in the short term, to restore the educational system to a healthy state. A much more overt interest in teacher education was therefore to be expected.

The pervading pessimism of the early 1970s was generated in part by the worldwide economic crisis caused by the rise in oil prices, and in part by the simple facts of demographic decline. Consistent drops in the birthrate, in Britain as elsewhere, placed the system under great strain since contraction is nearly always more painful than expansion, even if the latter is inadequately funded. The effects on the recently expanded world of teacher education were only too obvious. Government, which had financed that expansion, now found itself with wide and unchallenged powers to slim down the provision, and it used those administrative powers to produce significant changes in shape as well as in scale. In 1972, outside of the universities that were sheltered from the storms that were about to break, there were 130,407 students in teacher training. In 1978 there were 36,000 and, although there have since been modest adjustments, the effects of that shock will be permanent. It is not simply a question of less of the same. The college of education system has effectively disappeared, and only a handful of such single-purpose institutions survive. The separate regional and national organizations of those colleges have been abolished. Many colleges were brusquely closed; others were absorbed as going concerns by polytechnics or, in a few cases, by universities; many more diversified their programs of study in order to include a wider range of work for degrees and similar qualifications. These changes were part of a redrawing of the map of higher education, more than half of which is now conducted outside the universities.

The planning opportunity has been taken to redress the balance of the contributions made by the universities on the one hand, and on the other by the colleges of education (the few that survived), the polytechnics into which some colleges of education were absorbed, and the colleges of higher education (which some colleges of education became)—here referred to as a group, and for convenience, as "the colleges." The colleges in this sense are currently and misleadingly also referred to as "the public sector" in order to distinguish them from the universities that, although also publicly funded, have conventionally been regarded as enjoying a considerable measure of autonomy. In the early 1970s, when enrollments were of course highest, teacher education was provided in 27 universities and 180 colleges. By 1983, when most of the surgery had been accomplished, it was provided in only 56 colleges—and 27 universities! Within the colleges the last admissions to the three-year certificate course were in 1979, and all teacher candidates in those colleges now proceed to the B.Ed. degree. More surprising, perhaps, has been the marked shift within the colleges from the concurrent to the consecutive mode—from the B.Ed. to the one-year postgraduate course, the Postgraduate Certificate of Education (PGCE). This shift, from the longer to the shorter courses of the type advocated by the James Committee, has further tilted the university/college balance toward the former. It has also had the effect, intended or not, of assuring that the universities continue to concentrate—albeit not exclusively—on the secondary schools, whereas most intending elementary school teachers are trained in the colleges, which nevertheless make a substantial contribution to the staffing needs of the secondary schools. In a curious and incomplete sense, the much sharper divisions of the nineteenth century still influence the shape of the system.

These features of present British teacher education can be illustrated by the figures for admission to courses of teacher education in September 1987, shown in Exhibit 2.[9]

The total university share of admissions is therefore 32 percent contrasted with a tiny 4.4 percent in 1972. Nevertheless, 48 percent of secondary teachers are trained out-

Exhibit 2. **Figures for Admission to Teacher Education Courses, September 1987**

	PGCE		*B.Ed.*		
	Primary	*Secondary*	*Primary*	*Secondary*	*TOTALS*
Universities	946	4,582	447	349	6,324
Public sector	2,308	2,658	6,888	1,717	13,571
TOTALS	3,524	7,240	7,335	2,006	19,895

side the universities. The universities are predominantly concerned with teachers for the secondary schools—78 percent of their total admissions. But 54 percent of all students are on the one-year graduate, consecutive, course. These changes, taken cumulatively, are of great force: A much higher proportion than ever before of future teachers is being trained in the universities, and a much higher proportion on courses where the focus, at least in principle, is on professional preparation rather than on academic study. Here, then, are marked changes in the readings on the explanatory grid for the two themes of content and location.

But the current efficient phase of teacher education differs even more profoundly from its immediate predecessor. Government in the 1960s placed most of the expansion of teacher education outside the universities, although it is doubtful whether in the circumstances of that decade any real alternative was open to it. But unlike government in the elitist phase in its relationship to the college sector, it purposefully abstained from seeking to direct the nature of the courses provided: This was to be done by the universities, the regional organizations grouped around universities, or the colleges themselves. This is why 1976 represents a watershed in the British educational polity, for no government that cares publicly about the curriculum of the schools can be indifferent to the curriculum of those establishments that produce teachers for them.[10]

Nevertheless, few observers in 1979 anticipated the lengths to which a British government would go in asserting, or in some senses reasserting, its right to control such matters. The Secretary of State for Education and Science, who has the undoubted legal authority to confer or deny the status of Qualified Teacher, has ruled that access to that status shall normally be through courses of preparation approved by him. That approval is secured only if a number of conditions, or criteria, is satisfied, and approval is conferred or denied on the recommendation of a Council for the Accreditation of Teacher Education (CATE), the members of which are appointed by him. Universities, unlike the colleges, have been exempt from the visits of HMIs, although they have always been free to invite such visits. That position has not been altered legally. But the Council can make a recommendation only if it has access to a report written by HMIs. Every university in England and Wales offering courses of teacher training has now received such a visit. It is not yet clear whether CATE, when it has reported on all university and college courses, will continue to exist.

What is clear from the criteria is that government has strong views about the proper nature of teacher training. There is firm and unsurprising emphasis, at present of particular importance for candidates for the B.Ed., on the importance of academic subject studies. This emphasis has been publicly regretted by some educators, who argue that it is not in the best interests of intending primary school teachers; in that sense the debate on content is far from dead. Equally marked is the concern with pedagogy, a word if not a concept that had ceased to be much employed in the 1960s. To the government those who teach teachers should themselves have had recent experience of teaching; teaching practice must be extensive and well organized; experienced teachers must themselves be involved in the selection of students for courses, and in course preparation. Similarly, students in courses that are to win approval must be introduced to the importance of multicultural education and of special educational needs, and must have a good

understanding of the social context in which they are to work. All this represents an overt and principled attempt to give teacher education, of whatever type and wherever located, a sharp professional and practical focus.[11] What has been devalued, in colleges and universities alike, is the study of educational disciplines in the styles that had become orthodox in many establishments. The political and demographic changes of the later 1970s and the 1980s have produced many of the intended effects of the James Report: A second cycle (although not stated in those terms) for the majority of intending teachers, and a sharp emphasis on the professional imperatives of that cycle. Moreover, the segregated colleges of education have all but disappeared, and the distinction between university and college has substantially diminished. Although the primary/secondary distinction is of course still important, it no longer corresponds either to a simple difference of location or to variation in the type—graduate or not—of program. Universities and colleges are engaged in fundamentally similar work, and are unambiguously subject to the same controls.

Some critical questions nevertheless obtrude. In the efficient phase, the question of content has been decisively resolved: For all intending teachers the stress is to be on knowledge of basic subject matter (mathematics, a foreign language, or whatever) and on professional pedagogy; "abstract theory" has been beaten on the head. This clarity has been achieved by government control, exercised not only on the colleges (as previously in the elitist phase), but also on the universities. The issue of location has been redefined, with a growing similarity of program structure (the consecutive mode), a much larger share of the market for the universities, and a softening of the historic distinction between the university and the college sectors. Under the Education Act of 1988 the two sectors will be similarly managed, with the removal of all colleges (including, of course, the polytechnics) from local control and the creation of twin funding councils at the national level, designed to apply government policies.[12] One critical question therefore relates to the rationality of any continuing distinction be-

tween provision by the universities and the rest of teacher education. It is simplistic to suppose that the universities will automatically preserve some inherent commitment to teacher education based upon research. Indeed, the requirements of the new criteria (including a significantly longer teaching year) make it more difficult than ever before to pay serious attention to scholarly, as distinct from vocational, responsibilities.

Conclusion

It may well be that dilemmas of this kind will oblige the institutions, and not just the universities, to devise new patterns of teacher education in which the legitimate demands of utility are integrated with an open and inquiring approach to the tasks of teaching and the roles of the teachers. The internship scheme at Oxford University, developed in close association with a group of schools, is one example of such an effort. Such efforts are more readily deployed within the consecutive pattern of graduate teacher training, protected from the competitive pressures of the B.Ed., within which the objectives of a subject-based academic education and of professional preparation can be reconciled only with difficulty. In any case, as Exhibit 1 suggests, there seems now to be no clear rationale for the B.Ed. as a concurrent form of training, with its historical origins in the old training college model operating within a very different universe of secondary and higher education. Students themselves seem likely to prefer forms of higher education that allow them to defer final choices of career and to acquire bachelor degrees that have wider currency than the single purpose B.Ed.

The pre-service training of teachers has always dominated policy discussions. Awkward questions present themselves when attention shifts to the benefits of in-service education and professional development. Given the rapidly and unpredictably changing demands that will be made on teachers in the early twenty-first century, a concentration of effort and resources on the pre-service stage becomes hard to

defend. In any case, by 1990 two-thirds of the teachers in British schools will be over forty years of age; therefore, change and reform might more sensibly be concentrated on them and their younger colleagues already in service. In recent years there has been a welcome shift in this direction, but the prevailing orthodoxy is that teachers are prepared for a lifetime of work before they begin to teach. Equally tenacious is the orthodoxy, generally espoused by teachers' unions, that all teachers are in some sense equal and interchangeable. It may nevertheless be the case that the tasks of teaching in the schools of the present, never mind the future, would be better discharged by a redefinition of roles and hierarchies. Such a definition would make possible the delivery of more advanced forms of teacher education to an elite group within the teaching profession, and help to soften the impact of a crisis in recruitment.

In the 1990s that crisis will be generated by a number of factors. It is possible that the increasing regulation and appraisal of teachers will deter many able graduates from embarking on teacher education. It is likely that no government will be able to find the resources to reward all teachers at the level that will make teaching in itself financially attractive to ambitious young men and women. It is certain that demographic factors alone will create a severe problem. The demand for teachers will rise as the size of the age groups in the schools increases; the supply will inevitably fall as the numbers in higher education, again for simple demographic reasons, decline. Government has already suggested, without drawing attention too directly to this problem, that a partial solution may lie in admitting a new category of licensed (not qualified) teacher that would include reasonably educated candidates who may be given some simplified and abbreviated form of preparation.[13] It is ironic that suggestions of this kind have to be made at precisely the moment when the dreams of some past and present reformers appear to have been fulfilled: Only qualified teachers in the schools, all of them equally prepared within a redesigned system of higher education, all of them completing a bachelor's degree and receiving rigorous pro-

fessional training, all of them qualified for life to discharge the tasks common to all teachers. The efficient phase will, in its turn, prove as impermanent as its predecessors.

Endnotes

1. On the new Act see Stuart Maclure, *Education Reformed: A Guide to the Education Reform Act, 1988* (London: Hodder and Stoughton, 1988). Two preliminary points need to be made on terminology in this chapter. The terms "teacher training" and "teacher education" are used interchangeably throughout the chapter, although in some cases, in the first paragraph, they are contrasted in order to make a particular point. Education as a term emphasizes the academic and theoretical aspects of the enterprise; training stresses the vocational and practical. Second, this chapter is concerned with England and Wales, and not with Northern Ireland or Scotland. The experience of the latter, in particular, is significantly different with regard to all three critical issues of content, location, and control as defined later in the chapter. Nevertheless, and simply for convenience, the terms Britain and British are used for England and Wales, as being less cumbersome. See also endnote 3.

2. Much of the information used in the following paragraphs is taken from H. C. Dent, *The Training of Teachers in England and Wales, 1800–1975* (London: Hodder and Stoughton, 1975) and P. H. J. H. Gosden, *The Evolution of a Profession* (Oxford: Basil Blackwell, 1972).

3. Marjorie Cruickshank, *History of the Training of Teachers in Scotland* (London: University of London Press, 1970).

4. Harry Judge, *A Generation of Schooling: English Secondary Schools Since 1944* (Oxford and New York: Oxford University Press, 1984).

5. Tony Becher, ed., *British Higher Education* (London: Allen and Unwin, 1987).

6. William Taylor, "Robbins and the Education of Teachers," *Oxford Review of Education* 14, no. 1 (1988): 49–58.

7. *Teacher Education and Training: A Report by a Committee of Enquiry Appointed by the Secretary of State for Education and Science, Under the Chairmanship of Lord James of Rusholme* (London: Her Majesty's Stationery Office, 1972).

8. Harry Judge, "From Quantity to Quality: Teacher Education in Britain" in *Issues in Teacher Education*, Thomas J. Lasley, ed. (Washington, D.C.: American Association of Colleges of Teacher Education, 1986) vol. II, 55–64.

9. *Education Observed, 7: Initial Teacher Training in Universities in England, Northern Ireland and Wales* (London: Department of Education and Science, 1988), 45.

10. *Teaching Quality: Presented to Parliament by Command of Her Majesty, March 1983* (London: Her Majesty's Stationery Office, 1983).

11. *Initial Teacher Training: Approval of Courses, Circular 3/84* (London: Department of Education and Science, 1984).

12. *Higher Education: Meeting the Challenge: Presented to Parliament by Command of Her Majesty, April 1987* (London: Her Majesty's Stationery Office, 1987).

13. *Qualified Teacher Status: Consultation Document* (London: Department of Education and Science, 1988).

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The Education of Japanese Teachers: Lessons for the United States

WILLIS D. HAWLEY

The education reform effort in the United States has been stimulated in no small part by the success of the Japanese economy and the indisputably high academic achievement of Japanese elementary and high school students. While the reform effort in the United States recently has given substantial attention to teacher training, little reference has been made to how the Japanese educate their teachers. It seems worthwhile, therefore, to examine Japan's approach to teacher education. The Japanese system is very different from that in the United States and seems to be based on different assumptions about how resources available for training teachers can best be utilized.

What the United States can learn from Japan is, of course, limited by differences in their cultures, among other things. Moreover, comparisons of the two systems of teacher education tell us little about the outcomes of the investments made. Nonetheless, there are many things to admire about Japanese education. Since the quality of teachers surely accounts for at least some of the success of Japanese students—something the Japanese clearly believe—knowing more about teacher education in Japan may raise some

questions about strategies used in the United States which, in turn, could lead to improvements in the United States.

While I make some evaluative judgments and discuss the possible lessons the United States might learn from Japan, the bulk of the chapter provides information about what the Japanese have been doing and the changes in teacher education that are being proposed and made. Before I describe the way teachers in Japan are educated, it may be useful to put that discussion in context by providing a brief overview of teachers and teaching in Japan.

Japanese Teachers

Most Japanese teachers stay with their careers throughout their working lives. The rate of attrition is very low, though it is believed that early retirement is increasing among women teachers because of increasing stress they experience as a result of rising rates of student misbehavior.

There are many more teacher candidates than teaching jobs. More than one-fourth of all university graduates acquire teacher certification, which involves completing specified courses and taking a rigorous examination given by one of the forty-seven prefectures (which are roughly similar to counties in the United States). Of those who were certified in 1984, only 28 percent became teachers and only 16 percent were employed immediately after college.[1] Of course, not all those who seek certification seek a teaching position. Since the number of credits in pedagogy that are required to qualify for a teaching license for secondary schools is small (19 out of 124), many students seek teaching licenses as insurance in the event that they can not get a better job.[2] Experts say that teaching positions are increasingly hard to get, especially in primary schools and in large cities. In Tokyo, for example, it is estimated that only one out of five active candidates is employed. It is not uncommon for determined prospective teachers to seek a teaching position for two to three years before securing one.

Teachers in Japan are relatively well paid. There is a national salary schedule that is supplemented by various allowances, depending on where teachers live, the number of their dependents, whether they commute, the cost of their housing, and other conditions. Beginning teachers typically are paid more than white collar workers with college degrees, pharmacists, engineers, and many other professionals. Increases in salary, in addition to annual cost-of-living-type improvements, are based on educational attainment and years of service with longevity increases continuing for thirty-nine years.[3] Thus, *average* teacher salaries in Japan are significantly higher than those in the United States. The relative economic status of teachers is suggested by the fact that teachers must, by law, be paid more than government bureaucrats with similar education and years of experience, though the highest-ranked government officials earn more than teachers. The salaries of professors at public universities, which are generally the most prestigious, are about the same as those of teachers with similar educational backgrounds.

In general, starting salaries for teachers compete favorably with all but the top entry-level jobs in industry. And teacher salaries can more than double in real value over a teacher's career. Those who successfully climb the industrial ladder, however, can earn significantly more than senior teachers. But the certainty of reaching a secure, above-average income is a clear benefit of teaching not enjoyed by most other Japanese white-collar workers.

Teaching in Japan

Teachers in Japan teach 240 days a year in comparison to the 180 to 190 days usually taught by American teachers. However, Japanese teachers typically teach fewer hours per week than do American teachers, usually providing twenty-two, seventeen, and fifteen hours of instruction, respectively, at elementary, junior high (grades 7–9) and high school

levels.[4] This provides teachers time for planning, professional development, and interaction within the school day. On the other hand, teachers do supervise extracurricular activities, conduct weekend and vacation excursions, counsel students, and visit parents (often at home) on their own time. Indeed, teachers are considered responsible for their students' welfare at all times. Though the practical meaning of this norm seems to vary a great deal, it is not unusual for teachers to become involved in trying to solve problems their students may be having, even if these have nothing directly to do with school.

The quality and style of school administrators varies considerably. In general, principals seem to involve teachers in key decisions. This is most true where teachers are best organized. Some teachers are selected to serve as support personnel for other teachers. These positions, called *Shunin,* are staffed by teachers carrying regular course loads, but usually less extracurricular responsibility. *Shunin* are paid a very small extra amount (about $1.50 per day). The establishment of these positions by the Ministry of Education (Mombusho) has been strongly opposed by the major teachers' union (the Japan Teachers' Union), and the roles are taken most seriously by teachers who want to become administrators.

Japanese teachers seem to interact with each other fairly often and frequently depend on each other for professional advice. In general, they play an important role in the governance of their schools. The roles teachers play in school decision making and the facilitating functions of principals are similar to the roles many who would restructure schools in the United States want teachers to play. It seems ironic that the situation in Japan can be traced directly to efforts to emulate the governance of American schools imposed on the Japanese following World War II.[5]

The number of students per class varies considerably but is usually much larger than the average class size in the United States. Class size has been declining in Japan and averaged about 35 in elementary and junior high schools in 1984. But the average size is over 40 in many classrooms.

On the other hand, since schools are required to have more teachers than the number of classes, the pupil/teacher ratio was much lower than the class size—25, 21, and 19 in elementary, junior high, and high schools, respectively.[6]

Most classes are taught using whole-class instruction. Japanese students do vary considerably in ability and motivation, but tracking in the first nine grades (through junior high) is prohibited, and ability grouping is frowned on.

Some stereotypes of Japanese education picture teachers dominating classes in which there is little student involvement and a heavy emphasis on memorization. The teaching strategies I witnessed in 1986 in a dozen classrooms, and that were described in my discussions with dozens of Japanese teachers, are consistent with the descriptions of elementary school classrooms presented in a number of recent studies.[7] Japanese teachers clearly control their classrooms but they use their control to involve students—usually more than half the class in a given period. It is common for students to work in groups, be involved in peer instruction, and be engaged in debates. Homework is closely linked to class lessons, and higher order questions are asked frequently. No doubt there is enormous variation in ways students are taught in Japan, but elementary school teachers do not rely primarily on the lecture method. As one recent study of mathematics education concluded:

> Mathematic thinking has been considered as the most important objective in mathematics education. Children express their views and thinking without hesitation. Children are always involved in activities. Children's activities and discovery methods are used in teaching mathematics.[8]

In contrast to their elementary school peers, Japanese high school and junior high school teachers, especially the former, focus on text-based learning and engage in teacher-centered instruction. The major reason for this approach to teaching is the reality of college entrance examinations. The "exam hell" for Japanese adolescents that Americans

hear about is real; teachers focus on topics that are tested and prepare their students in various ways to do well on the exams. The quality of a high school is judged by the quality of the universities to which its graduates gain admission.

Finally, Japanese teachers, while they are the focus of current school reform efforts, generally hold positions of high status in their community. I could find no recent quantitative data on the relative prestige of teaching (the most recent study by Leestma et al. is more than a dozen years old), but the demand for teaching positions and the academic quality of aspirants seems to confirm this notion. The term *sensei,* to which teachers are entitled, conveys respect and honor.

Teacher Education in Japan

Like all teachers, Japanese teachers learn from many sources, but my focus will be on the role played in the professional development of teachers by colleges and universities and by formal in-service training. As is true elsewhere, there are many special kinds of schools and a number of special teacher licenses in Japan. My description applies to teachers in conventional public schools where well over 90 percent of Japanese children are educated (though enrollment in private high schools is significant and growing). Kindergarten is not compulsory in Japan, and I will not discuss the preparation of kindergarten teachers in order to simplify the presentation. I have organized this description to reflect the conventional pattern of teacher education in Japan: pre-service education, induction, in-service training, and graduate study.

The post-World War II history of reform in teacher education has been concerned with the democratization of the country and the need to socialize teachers accordingly. Until the late 1970s, the improvement of teacher education focused on the problem of supplying enough well-qualified teachers to serve the demands of the economy for well ed-

ucated workers and managers, and the upgrading of the quality of pre-service education to national minimum standards. Teacher education has moved from a system in which normal schools that placed heavy emphasis on what was seen by critics as "narrow professionalism" played a major role, to a more "open system" that placed few certification requirements in the way of the prospective teachers, thus encouraging the diminution of professional course work in universities.[9] Some teacher educators in Japan have sought to require post-baccalaureate study as a condition for initial appointments, but these proposals have not made much headway and are not on the current reform agenda.

Pre-service Teacher Education. The basic requirements for preparing to teach, which are set out in national laws and administrative regulations, vary by the grade level to be taught. Teaching certificates are granted by specific prefectures and are good in any prefecture for life. Prospective teachers may apply for either first- or second-class certificates, which are differentiated by the amount of formal education required. In practice, most newly appointed elementary and junior high school teachers have first-class certificates and almost all high school teachers are appointed with second-class certificates. This means, in effect, that almost all new teachers have a bachelor's degree and almost none has a master's degree (which requires a two-year course of study) or any other form of extended graduate study.

It is possible to be certified to teach in elementary school with only a junior college education, and many older teachers do not have a bachelor's degree. However, because prefectural examinations are fairly rigorous and the number of teacher candidates is very great, junior college graduates are seldom appointed now. It seem likely that the junior college route to a teaching credential will be eliminated in the near future, except for kindergarten teachers. There are two general types of four-year college education for prospective teachers: General universities and teacher education universities. General universities certify about 80 percent of the prospective junior and senior high school teachers and 50 percent of the el-

ementary teachers. The national universities are generally more prestigious, whether they are general in character or teacher education focused. As one would expect, students in teacher education universities take more course work in what are referred to as education-related subjects.

The courses students must take in order to be certified are specified by Mombusho. Particular universities may require additional courses for a major in education, but one need not major in education to be certified at any level. So far as I can determine (no national data are available), virtually no prospective high school teachers major in education and most elementary teachers do. Most, but not all, junior high school teachers major in a traditional discipline.

The courses students must take to be certified in Japan are considerably fewer than those typically required of would-be teachers in the United States. A bachelor's degree in Japan requires the completion of 124 credits (these are roughly equivalent to the "units" or "hours" used to measure student course work in the United States), though individual institutions may require more credits for particular majors, including education. Most high school and junior high school teachers take what amounts to an academic major (32 or 40 credits depending on the subject taught), between 11 and 13 credits in pedagogical subjects, and the other requirements of each college or university.

Most secondary teacher candidates have two weeks of pre-service practice teaching, and elementary teachers typically have four. Most general university students who want to teach do not otherwise have practical experiences in schools as part of their college courses. In general, professional courses focus on the philosophical or theoretical aspects of the subject rather than on methods of instruction.[10] The minimum amount of professional course work that must be taken by those seeking certification at junior and senior high schools are:

Educational principles (3 credits/hours)
Educational psychology, with a focus on adolescents (3 credits)

Methods of teaching (3 credits)
Moral education (not required for senior high candidates) (2 credits)
Practice teaching (2 credits)

The professional courses required of elementary school teachers by national policy include:

Educational principles (4 credits)
Child psychology (4 credits)
Study of teaching materials (including related teaching methods) (16 credits)
Moral education (2 credits)
Practice teaching (4 credits)

The pre-service professional education of elementary school teachers involves from one-third to one-fourth of their college course work. They are not required to major in a subject, and each college or university may have a different course of study, as is true in the United States. The specific contents of the professional courses required of prospective teachers vary with the university and the professor. The emphases placed on particular subjects by the licensing examinations given by prefectures often will influence the content of college courses taught in that prefecture.

Each university may add to the requirements for teacher certification specified by national policy. It appears that there is great variety in the content of teacher education programs, especially those for prospective elementary teachers. Moreover, there is an increasing amount of experimentation in the design and delivery of pre-service programs. While universities may require more course work of those pursuing the education curriculum than does the government, certification is granted by prefectures, and candidates are not required to take courses other than those specified by national policy.

All teacher education programs, public or private, must be approved by Mombusho. Once approval is given, it is not taken away. There is no recurrent review process with respect to teacher education programs, either by the ministry or any private accrediting association. About 85 percent of all the institutions of higher education offer teacher-training course work and, as would be expected, the quality of that training varies enormously.[11]

The general patterns for pre-service teacher education just described are systematically different in the three new National Universities of Teacher Education. But few teachers graduate from these institutions. I will discuss their programs further when proposals for reform are outlined.

When considering the limited course requirements in subjects that the elementary teacher might teach, one should keep in mind that the standard curriculum in Japanese high schools is comprehensive and fairly demanding. For example, college-bound high school graduates would have taken five or six mathematics courses, including calculus and statistics. As every international comparison of student achievement shows, most Japanese high school students are simply much better educated than most high school graduates in the United States. Moreover, to secure college admission, students must take both a national examination and examinations for specific universities. While many universities are not very selective, admission to the prestigious ones is quite competitive. Academically able students generally want to attend the most prestigious university they can because both public and private employers give strong preferences to the graduates of these universities. Thus, the examination system motivates students to take rigorous courses that will help them on the exams. The exams cover the basic academic subjects taught in elementary schools. In short, unlike the situation in the United States, it is assumed in Japan that elementary school teachers know the academic subjects they teach.

The general routes to a teacher's license apply to all but a small percentage of the teaching certificates awarded. But

certificates can also be obtained by passing examinations given by some faculties of education or by Prefectural Boards of Education. These routes exist to recruit particularly talented people who have not taken education courses but have demonstrated their expertise in the specific subjects they would teach. These certificates are used for certain applied fields like calligraphy or architecture and in specific aspects of special education. No data on how many persons receive their certificate in this way are available, but the number, as reported by the Japanese officials I interviewed, is very small. Teachers may add other fields of certification to their primary field in this manner.

Induction to the Profession. As noted earlier, prospective teachers typically practice teach for only two or four weeks. There is resistance within universities, at least the major ones, to expanding such supervised practical course work because it is seen as reducing the time would-be teachers can devote to other subjects. Faculty in academic disciplines claim that this position is philosophically grounded, while teacher educators often say it represents protection by different faculties (schools or departments) of the space they have in the curriculum. Moreover, requiring more practice teaching has been seen by national universities as a return to the more restrictive pre-war closed system in which universities focusing on teacher education would dominate teacher preparation.[12] Increased time for practice teaching is further discouraged by the fact that in most larger cities—where colleges and universities are heavily concentrated—the great numbers of teacher candidates are seen as a burden by school systems and placements are simply not available for all the students who want to practice teach. Despite the barriers to increasing the time for practice teaching, one week was added to both secondary and elementary requirements in 1989. This additional week was justified by the need to develop prospective teachers' counseling and parent involvement competencies.

Annex at Tsukuba that provides learning activities that range from two days to a month in length for experienced teachers who are expected to provide leadership in their schools. In 1984, 28,658 teachers participated in the National Centre's program, and about one-tenth of these were in residence at the annex.[13] Furthermore, Mombusho in effect subsidizes the education of up to 1,800 teachers with at least three years of experience who participate in two-year master's courses at one of three National Universities of Teacher Education. In addition, thousands of teachers take courses and workshops at public and private universities whose costs are kept down by Mombusho; the Prefectural Boards of Education also sponsor extensive seminars for administrators and teachers in connection with the introduction of new curriculum guidelines. These guidelines are revised every ten years, and teachers participating in the seminars are expected to teach other teachers about the changes and how to implement them.

From time to time, the publicly funded Japan Broadcasting Corporation conducts televised short courses for teachers that are meant to provide model demonstrations of how to teach particular topics often related to curriculum changes.

Prefectural Support—Each prefecture funds an in-service training center that offers workshops and courses on a continuous basis. Every teacher is entitled to six days in residence at their center every five years, but some teachers attend more often, depending on the initiatives of their local school boards or their school principals. Particular learning experiences vary from one to eight days and usually focus on ways to improve teaching methods for particular subjects, on ways to deal with students who have special problems, or on other prefectural priorities.

The professionals who staff the centers, almost all of whom are former teachers chosen because of their reputations as effective teachers, decide on the centers' curricula. Most of the prefectural centers conduct annual mail surveys, undertake post-course evaluations, and consult with an advisory

A small number of universities, including the three new National Universities of Teacher Education, which are located in smaller towns, do offer more extensive practice teaching opportunities for prospective elementary school teachers in special university-related schools (that serve randomly selected students), as well as other opportunities for in-school observations and interaction with teachers throughout the undergraduate years. There are schools affiliated with many universities, but in most of these schools the clinical training for teacher candidates is perfunctory.

All newly appointed teachers undergo 20 days of intensive training at their prefectural-level in-service center prior to taking their positions. Once on the job, the formal education opportunities of new teachers differ by school, local system, and prefecture. It has been widely recognized in Japan that first-year teachers lack the practical teaching competencies needed to be effective. In 1987, Mombusho encouraged the establishment of various types of induction programs and required that all prefectures implement entry experience for new teachers to provide the equivalent of 125 days of professional development under the tutelage of one or more senior teachers. It might be remembered that there are few first-year teachers in a given school system because teachers seldom leave the profession and the school age population is declining.

In-service Training In-service opportunities for professional development are available from local, prefectural and national sources.

National Programs—Mombusho provides teachers with a variety of ways to enhance their knowledge and competence. Each year Mombusho directly funds about 1,200 teachers and aids in the funding of almost 4,000 additional teachers who are sent to other countries for two to five weeks to study the educational strategies being pursued elsewhere. These trips involve groups of teachers who may participate in workshops, observation, and research.

Mombusho also sponsors the National Education Centre

committee in which teachers are the main participants to determine which topics teachers would most like to learn more about. The prefectural center staffs visit schools, especially those most distant from the centers, to provide on-site seminars and consultation for individuals or small groups. The centers also have libraries accessible to teachers and administrators and engage, with varying degrees of energy, in efforts to disseminate new information and research. Two prefectures maintain separate science education centers that complement the activities of their general-purpose prefectural centers.

Though the prefectural centers carry out many functions typically carried out in American universities—including research—continuing relationships between the centers and Japanese universities are uncommon. One reason for this is the universities' concern that collaboration of this sort could result in government—national or local—intrusion on their prerogatives. Prefectural centers educate far more in-service teachers each year than do universities. While in 1988 some 3,000 teachers were released from regular duties for short-term studies at universities, Japanese universities play very little role in the continuing education of teachers.[14] As noted previously, prefectural boards, as well as some local boards of education, commonly provide teachers with opportunities for foreign travel, and many pay full salaries, and sometimes additional expenses, to selected teachers while they attend the two-year master's degree programs offered by the National Universities of Teacher Education.

Local Opportunities for Professional Development—About 25 of the 650 Municipal Boards of Education support in-service training centers, many of which are similar in general function to the prefectural in-service centers. Typically, these are in larger cities and focus on topics of special concern to the municipality. Many of the municipal centers appear to define their curricula so as to minimize duplication with the prefectural centers.[15]

Almost all schools provide monthly programs of in-service teacher education. Some of these are organized by the principal or assistant principal, often in consultation with

teachers. Such programs vary substantially in quality, and most teachers I interviewed felt that the programs organized independently by administrators were boring and/or irrelevant, a complaint often heard from teachers in the United States.

Often teachers in Japan will design their own in-service study and discussion groups, usually around the subjects they teach (for instance, English language discussion groups) or around particular problems that a school is having, such as student bullying. In many schools, the union takes the lead in organizing such groups, and in some schools the union regularly organizes an intensive program two to three times a year.

School-level, in-service training in Japan takes several forms, the most common of which are visitations to other schools, half- or full-day seminars organized by teachers, group research projects, independent study, and the demonstration of model lessons in a particular subject.[16] The incidence, quality, and duration of these efforts vary significantly, by all reports, but no relevant data are now available.

Many school-level, in-service programs are conducted on teachers' own time—usually weekends and vacations—except for visitations to other schools. And teachers do not receive extra compensation for these activities. In many high schools, teachers will be sent to national or regional conferences focused on subject matter teaching (mathematics education, for example). Teachers who participate in such activities are expected to actively share with their colleagues the lessons they learned at the conference.

One of the functions *Shunin* are supposed to serve is the facilitation of the development of their colleagues. However, the assumptions of such a role is contrary to the egalitarian values of the typical Japanese teacher. Thus, mentor-learner relationships are uncommon; the norm of reciprocity shapes teachers' interactions.

One other source of teachers' professional development in Japan is their movement to different schools within their prefecture every four to ten years. While this practice has

other functions, such as promoting equality across schools, job rotation is intended to broaden a teacher's knowledge of alternative teaching and organizational methods.

Obviously, teachers in Japan have a wide variety of opportunities for continuing professional development. Some—such as foreign travel and two-year sabbaticals for advanced study—involve very large per-teacher expenditures; local and prefectural programs for in-service education vary enormously in character, quality, and accessibility. I have only pointed to general patterns. The most common criticisms of in-service programs one hears from teachers are that selection to the most elaborate of them may depend on whether teachers support school administrators rather than on whether the teachers selected are the most worthy—or the most deserving— and that school-level programs, however useful, come on top of already heavy commitments. While these and other concerns are not uncommon, the investment made by government and by teachers themselves in the development of expertise they can use in their current roles is substantially greater than in the United States.

Graduate Study. Few teachers in Japan have been or are involved in a program of graduate study that leads to an advanced degree. Universities and colleges do offer summer courses and workshops that many teachers attend, but the American pattern of part-time pursuit of a graduate degree is unusual.

In 1984, only 1,850 students entered graduate study in education throughout Japan and only 140 of these were doctoral students. The number of new master's course students entering in 1984 was almost three times greater than the number who entered in 1975, but over 40 percent of this growth was in the master's courses at three innovative Universities of Teacher Education. The number of new doctoral students rose between 1975 and 1984 by less than 10 percent.[17] Overall, less than 3 percent of the teachers in Japan have an advanced degree.

There are several reasons why there has been so little

interest among Japanese educators in graduate study. First, graduate degrees have not been necessary to achieve advancement or relatively high status. Second, graduate study has not been common and access has not been as available as in the United States; the first master's course in education is only thirty years old. Third, part-time study toward a degree at the more prestigious public universities is not an option. Most universities seem to have little interest in adjusting to the needs of part-time students, and the demand for in-service education from teachers is met by non-university sources, especially the prefectural centers. Fourth, the demand for undergraduate education has risen rapidly in recent years; many professors already teach large classes, and facilities are overcrowded and generally inadequate. Fifth, while teachers can obtain substantial economic benefits from attaining an advanced degree—a master's degree increases a teacher's base salary about 17 percent—the economic rewards from course work without the degree are very low and are available only to high school teachers. Sixth, unlike the situation in many parts of the United States, additional course work is not required for continuing certification.

The current reform proposals do seek to make graduate study in many fields more accessible, but systematic strategies for achieving this goal have not been developed.

Reforming Teacher Education

Japan is in the middle of what ministry officials and some other observers call the third major educational reform effort (the first was in the 1870s and the second followed World War II). While there is debate about how deeply rooted this reform effort is, the recommendations of the National Council on Educational Reform (NCER) and of other proposals that have received public attention call for radical changes in all levels of education. Improving the quality of teachers has a major place on the reform agenda, and teacher education is seen as one way to do this. It

is important to note that the term *improving the quality of teachers* does not mean the same thing in Japan as it does in the United States. In Japan, the issue of whether teachers are academically able or know the subject they teach is moot; apparently no serious doubts are raised in this regard. Some teacher educators and some teachers are concerned about the lack of diversity and flexibility in the instructional strategies that teachers employ. It is believed, however, that most of this problem derives from rigidities in school curricula, norms against grouping students or individualizing instruction, and constraints on teaching related to high school and college entrance examinations. Thus, improving teaching methods is generally seen as less important than another problem: the need to improve teachers' responsiveness to the social and emotional needs of students. Critics of the teaching corps, including some leaders of the teachers' union, see the new generation of teachers as "lacking heart." Consequently, NCER, which was established by the national government to foster reform, asserts that teacher training—pre-service and in-service—should give greater attention to the ability of teachers to counsel and nurture students and provide for their moral education.[18] Likewise, the Japan Teachers' Union (JTU) argues that teachers need to "understand children as human beings, share desires and difficulties they have within themselves," and match their understanding of the subjects they teach with their knowledge of the development of children.[19]

Major strategies being advocated for enhancing teacher quality in Japan can be grouped into five categories:

1. Increased emphasis on teacher competence to deal with student diversity and misbehavior in selecting and educating teachers.
2. Changes in university entrance examinations.
3. More emphasis on practical teaching skills.
4. The provision of alternative ways to achieve a teacher's license.

5. The further development and systemization of a career-long plan for in-service education.

The last of these reflects Japan's commitment to in-service education, but proposals that go beyond general principles have not been developed. I will comment briefly on these five strategies and then outline the character and functions of the relatively new National Universities of Teacher Education that embody some of the more specific changes in teacher education that Mombusho, and many teacher educators, seem to be promoting.

Competence in Student Counseling. Historically, teachers in Japan have been vested with general responsibility for the welfare of their students. The concern they manifest, often referred to as "love," has been seen as an important source of the respect students accord teachers. In recent years, there has been a breakdown in the respect students accord their teachers, reflected in misbehavior and occasional violence. While incidences of bullying other students and attacks on teachers are not great by comparison with American schools, these events seem to many Japanese to reflect a general breakdown in traditional values and internal sources of self-discipline and hard work. Teachers are being blamed for student misconduct. At the same time, there is a growing awareness that the lockstep approach to education that characterizes many Japanese junior and senior high schools is not responsive to the contemporary diversity of students' needs and abilities. Reform proposals to deal with this problem take the form of increased teacher education in ways of dealing with students. But, more fundamentally, both leftist and rightist reformers want more attention in the selection process to the personal commitments, such as love for and understanding of students, and interpersonal skills of teacher candidates. Both the JTU and the NCER, which is seen by the JTU as an agency of the Liberal Democratic Party that the union opposes, put some of the blame on the examination systems for entry to high school and college. For example, Ichiro Tanaka, the JTU

president in 1986, has argued that because the examination system emphasizes only academic skills, students who study almost full time to do well on them typically have not developed social skills and, therefore, when they become teachers they lack an understanding of why children do not excel in their studies.[20] The more competitive the positions in teaching are, the more likely it is that those students who do well on the examinations will obtain teaching positions.

Changes in High School and University Entrance Exams. The current examination system dominates the lives of most ambitious students. Virtually everyone in Japan has something bad to say about it. Reformers want the examinations to play a smaller role in student selection for college, and some want the examinations abolished completely for entry to high school. The NCER wants examinations to be tied to curriculum and wants other considerations—grades, activities, personal characteristics—taken into account in making admission decisions. But despite its severe limitations, the examination system persists. The examinations are seen as a way of promoting equality based on merit and, in a society with a history of elitism, this value is now highly honored. The examinations are also thought to be effective in motivating students when other sources of social control appear to be diminishing in their power over young people. And because the university examinations are institution-specific, any reduction in their importance, or the introduction of standardized examinations, is resisted by universities fearful of a loss of autonomy.

Developing Stronger Pedagogical Skills. Almost all critics of teacher education in Japan agree that prospective teachers, especially those educated at general universities, have inadequate opportunities to learn about and practice instructional techniques. When teacher education was opened up and moved into general universities, teacher certification requirements were minimized, and only minimum space in the undergraduate curriculum was yielded to education

schools by other faculties. Thus, there is limited time in the undergraduate course of study to offer more course work in education. Clinical training is uncommon, in part because university classes are large and didactic. Practica within general universities are almost nonexistent and, except in the universities with affiliated teaching schools, practice teaching opportunities are hard to arrange. Furthermore, research on effective teaching in Japan is not extensive, and this may undermine claims on the curriculum made by teacher educators.[21] Except among certain teacher educators, there is almost no discussion of extending teacher education into the post-baccalaureate years.

Despite the commitment to minimize pre-service professional training and to provide in-service education through prefectures and schools, there are recurrent proposals to require or encourage more university-based professional training. In late 1987, the Council on Teacher Education, which is advisory to Mombusho, made the following proposal:

1. Three levels of teaching certification should be adopted—

Advanced: For persons completing two years of post-baccalaureate studies.

Standard: For persons with a baccalaureate degree.

Junior: For persons with two or three years of college work. Teachers with a Junior credential would have to achieve a standard credential within fifteen years, except those teaching kindergarten.

2. Two forms of what is being called "alternative certification" should be established—

Special Certificates: Granted by prefectures to persons in nonacademic fields, these would be limited in time and usable only in the granting prefecture.

One-year Post-baccalaureate Certification Programs: For "matured persons."

3. Increased course work should be developed for certification, including professional courses in school management, the use of technology, student guidance, and extracurricular activities.[22]

These proposals face strong opposition from national universities, concerned that the emphasis on professional education will strengthen universities that specialize in teacher education, as well as from junior colleges, whose role in teacher education would be undermined.[23] Proposals that teachers should secure advanced certificates are opposed by the JTU for the same reasons the JTU has opposed the creation of *Shunin* positions. Furthermore, the three National Universities of Teacher Education fear that this would stratify teachers and increase the government's influence on teachers' beliefs and instructional strategies.

In addition, there are philosophical arguments against increasing the amount of professional education required of teachers. As in the United States, these arguments stress the importance of liberal arts and disciplinary education, the importance of focusing on the outcomes rather than on the processes of teacher education, and the belief that teachers will learn practical skills better on the job than in university courses.

As noted earlier, concern over the readiness of new teachers to engage in effective teaching has resulted in the establishment of extensive in-service programs for first-year teachers. How these programs will affect calls for more extensive university-based teacher preparation remains to be seen. Unlike many induction-improvement proposals in the United States, reforms proposed in Japan envision no role for universities in this process. And teacher educators, while generally endorsing the idea, are not seeking a role in the internship, apparently because they fear government control of their teacher preparation programs. The internship was also seen by the NCER as a way to screen prospective teachers.

Alternative Routes to a Teaching License. The NCER seems convinced that there are many talented people who would like to become teachers but have not traveled, or will not travel, the conventional paths to a teacher's license. (Never mind that more than one-fourth of the young college grad-

schools by other faculties. Thus, there is limited time in the undergraduate course of study to offer more course work in education. Clinical training is uncommon, in part because university classes are large and didactic. Practica within general universities are almost nonexistent and, except in the universities with affiliated teaching schools, practice teaching opportunities are hard to arrange. Furthermore, research on effective teaching in Japan is not extensive, and this may undermine claims on the curriculum made by teacher educators.[21] Except among certain teacher educators, there is almost no discussion of extending teacher education into the post-baccalaureate years.

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uates in Japan are certified to teach and that only one-sixth of those certified to teach find a job in their first year out of college.)

There are four proposals on the agenda to open up the teacher certification process. These would establish special one-year or half-year training courses in universities that could be entered at any time; certification tracks for attracting competent people to teach vocational and other practical subjects and foreign languages, prefectural-specific certificates for adults tailored to local needs; and part-time opportunities to teach without a certificate. These proposals are not seen by the teacher educators I talked to as a threat to them. Alternative paths to certification now exist and are seldom used. The current system provides some protection for employing prefectures and municipalities that can attribute their choices to "the way the system operates." The JTU, however, is opposed to these plans, arguing that they will reduce the status of teaching and provide Liberal Democratic Party-dominated local boards with an opportunity to appoint compliant, antiunion personnel.

In-service Education. Japanese teachers have considerably more extensive and diverse opportunities for in-service education than do American teachers. The NCER has called for greater coordination and planning of in-service education. Just how this might occur is yet to be revealed. There is some indication that universities, confronted with declining numbers of 18- and 19-year-olds, are exploring ways to increase their role in the continuing education of teachers.

New National Universities of Teacher Education. In 1980, two National Universities of Teacher Education admitted their first in-service master's degree students. These universities (Hyogo and Joetsu), to which was added a third (Naruto), are officially described as "innovative." That is, they are to manifest and demonstrate reforms. Thus, a discussion of the prospects for change in teacher education in Japan would not be complete without an overview of their programs.

The National Universities of Teacher Education admit only teachers with three or more years of experience to the master's course. The teachers' two years of full-time, graduate-level study are fully funded by the prefecture in which the teacher is employed (although about half of a teacher's salary comes from the national government). The two hundred to three hundred students admitted annually to each university take both subject matter and pedagogical courses and engage in a substantial research or development project. Teachers are nominated by their prefectures; admission is based on scores on each university's admission test, recommendations by administrators, and other evidence of professional promise. It is assumed by Mombusho—which handsomely supports these universities—and by the faculties of the universities that the teachers who participate will assume formal and informal leadership roles in their schools. These assumptions have caused the JTU to oppose the universities. Despite the union's disapproval, the primary constraints on enrollments are the ability and willingness of prefectures to pay the masters students' salaries rather than a lack of interest among teachers.

The three new National Universities of Teacher Education were established initially as sources of in-service education, but may also have a role to play in the reform of preservice teacher education. Each of these universities admits about two hundred students each year to pursue undergraduate courses of study that would qualify them to teach (assuming they passed prefectural examinations) in elementary or junior high schools. Although the course of study at each university varies, these institutions place considerably more emphasis than other national universities on field experiences that are integrated with the professional curriculum. These universities also insist on what would be called a broad liberal arts education in the United States and a focus on a subject matter field. The extent of the latter course work depends on the specialty for which the student is preparing and ranges from six to eleven courses (each course being worth two credits). As noted earlier, these

subject courses are added to a reasonably strong base of knowledge developed in high school.

How effective are these innovative programs? There apparently are no studies that compare the teaching competence of teachers educated at these universities with teachers educated elsewhere. But the National Universities of Teacher Education attract students who score above the national average on the preliminary college entrance examinations. Students I interviewed at Hyogo University of Teacher Education said that they chose the school, among other reasons, because their job prospects were good. Other teacher educators seem to know and respect the programs at these universities, but they do not hold out much chance for gaining the support within their own universities for bringing about such changes.

The Prospects for Reform. How likely is it that the reforms being proposed will be implemented? Not surprisingly, the improvement of teacher education is complicated by political concerns. While Mombusho has considerable authority with respect to elementary and secondary education, its power over higher education is more limited. Japanese universities enjoy considerable autonomy, and they guard this privilege with great zeal. Moreover, within universities, faculties are fairly autonomous, and key policies are not made without faculty approval. Thus, arrangements that would involve the sharing of power for teacher training by schools and universities are seen by universities as a potential threat to their independence. Because the three National Universities of Teacher Education have relatively less autonomy vis-à-vis Mombusho, and administrators appear to have more discretion vis-à-vis faculty than is the case in other national universities, they are more vulnerable to reform proposals. But they already embody many of the changes being advocated. And, as noted earlier, changes in the widely criticized college entrance examination system are considered by some university leaders to be sym-

bolic of a withdrawal from a commitment to traditional values and a threat to their autonomy.

The largest teacher's union, the JTU, opposes virtually all initiatives proposed by Mombusho, at least in part because they are seen as the actions of the Liberal Democratic Party, whose hegemony in Japanese politics the JTU contests through its active role in the Japan Socialist Party, the largest opposition party. The JTU has been particularly strong in its opposition to in-service education offered under the auspices of the National Universities of Teacher Education or by various agencies supported directly by Mombusho and by prefectural in-service centers that are seen as agents of central control. In localities where the JTU is strong, it can apply considerable influence on local governments and on teachers. At the national level, while it does not have the power to get new programs enacted, it can sometimes keep new proposals from gaining parliamentary approval by joining with other groups resisting change—often for different reasons.

One of the constraints on the reform effort in Japan is the relative absence of empirical research on teaching or teacher educators. Researchers and others in the United States often lament the absence or misuse of research in the formulation of public policies. But in Japan empirical research on schooling and instruction is almost non-existent. I examined the titles and abstracts of almost every one of more than five hundred articles published in Japanese education journals. Fewer than 10 percent appeared to embody quantitative analysis, and many of these dealt with learning-disabled children or problems of assessing student performance.

My guesses about the prospects for changing teacher education in Japan are the following:

1. Alternate routes to a teaching license will be authorized but not widely used.
2. Some greater emphases on personal characteristics of applicants will be given in selection, and counseling skills, seen to be related to teachers' personal characteristics, will be fostered through increased emphasis on them in in-service programs.

3. The further development and coordination of in-service training will be achieved.
4. Changes in the content and emphasis given to university and high school entrance exams will be marginal and inadequate to address the concerns of their critics.
5. Internships will be successfully implemented and this will discourage efforts to enlarge the role of universities in both pre-service and in-service teacher education.

I think that the new National Universities of Teacher Education will continue to innovate but that enrollment in their master's courses will remain problematic and the lessons they teach about reform will not result in systemwide changes. However, the impact of the National Universities of Teacher Education is conditioned by the receptivity of school administrators to the ideas that experienced teachers bring back with them following their two years of intensive study. There seem to be few school-level efforts that foster implementation of the newly learned practices.

Conclusion

Let me identify four lessons from Japan that I think those who would reform teacher education in the United States may wish to consider. First, whatever its shortcomings in readying teachers for practice, it seems clear that the open system of teacher preparations in Japan contributes to the large pool of academically able potential teachers. The teacher labor market belongs to the buyer. Given the size and quality of the pool, the problems to be addressed are selection, socialization, and further professional development.

Second, and perhaps the most obvious difference between teacher education in the United States and Japan, the Japanese place less emphasis on pre-service preparation and more emphasis on in-service professional development. And in-service education is receiving substantial attention in current discussions about educational reform in Japan. This is in marked contrast to the relative absence of such concern

by various national and state commissions and task forces in the United States.

There are several reasons for this emphasis on in-service education in Japan. Efforts by teacher educators to increase the number of pre-service courses have been opposed by their university colleagues, and the private colleges and former normal schools that rely on teacher candidates for enrollment do not want to open the door to changes that might strengthen teacher education in the more prestigious universities. In addition, the Japanese do not take the content of a student's college education very seriously. Classes are large, grading standards are low, and professors generally do not invest heavily in their teaching.[24] Undergraduate education is seen as a cooling out time for students who have weathered the stress of junior high and high school pressures. Without exception, college students in Japan will tell you that they studied much harder in high school than they do in college. If this were the only explanation for the low investment in pre-service teacher education, one might expect, given the excess supply of teachers, that there would be a move to extend pre-service teacher education by adding a year of post-baccalaureate study, or at least to provide incentives for prospective high school teachers to obtain first-class certificates (which require a minimum of 30 credits of post-baccalaureate study). But there is little such interest in Japan.

Another reason for the emphasis on in-service education is that this strategy is seen to be a cost-effective way of enhancing teacher competence, one that recognizes that what teachers need to know about teaching will change over time. As Horashi Keda, former Director General of the National Institute for Educational Research, has explained:

> Great expectations are placed on in-service training for the improvement of teacher quality. This relates partly to the employment system of teachers, by which teachers are employed for life and work within the same place. . . . There has therefore been a tendency for employers to prefer the expansion of post employment education.[25]

Many of the teacher educators and students I talked to stressed the cost-effectiveness of the in-service teacher education relative to pre-service education (though most of these had themselves not experienced very intensive pre-service preparation programs). The implicit theory of teacher learning they espoused might be described as developmental—they saw teachers' capacity and motivation to learn being enhanced by their experiences in teaching.

A third lesson from Japan is related to the second: Significant effort should be invested in supporting the professional development of teachers during their first year of service. The idea that teachers learn many things—some useful, many not—as they begin their careers is well established in the United States. However, the induction programs being implemented in many states are little more than emotional support systems. If first-year teachers learn a lot about teaching, it follows that a big investment in what they learn—including a big investment in the teacher or teachers from whom they learn most—will have a big payoff.

Fourth, the Japanese have developed a comparatively elaborate system of professional development for teachers in which universities play a small role. One might see the United States moving in a similar direction. However, the consequence of the profession-and-government-dominated strategies in Japan may be to divorce the practice of education from theory and research. If the functions of universities include the questioning of the status quo and the development of research-based knowledge, the minimization of the role of universities in the *professional* development of teaching may have the consequence of reducing the capacity of schools and teachers to change.

A fifth lesson from the efforts to reform teacher education in Japan is that it is, as Elmore and McLaughlin suggest most reforms are, "steady work."[26] That is, the improvement of teacher education in Japan, as in the United States, is a continuing process in which few ideas die and most require a fairly long gestation period before they are applied. But the process of proposal, debate, adaptation, and recon-

sideration is infrequently burdened by evidence of the likely effects of proposed changes based on pilot studies, systematic international comparisons, and the like.

A sixth lesson from Japan is that teacher education can be of relatively low value and still receive a lot of attention from educational reformers. Those who advocate improvements in teacher education in Japan claim too much for the proposed changes, as do advocates for teacher education reform in the United States. For example, the idea that teaching teachers how to better counsel students will address the changing attitudes of young people in Japan toward authority is wishful thinking and invites blame being placed on teachers for problems they have little part in constructing. A sandbag is an effective way to control the irrigation of a rice paddy, but it is an inappropriate tool to reroute a flood tide.

Let me conclude by observing that the Japanese have been, and continue to be, interested in how education in the United States is carried out. At least when we are at our best, Japanese teacher educators seem to think we have a lot to offer them. To be sure, there is concern among many in Japan that its educational system is too westernized. But, in general, teacher educators in Japan find our efforts to integrate theory and practice, to expand graduate study, and to infuse our methods courses with research findings to be worth their consideration. This suggests to me that it may be worth knowing more about what we do well in the United States at the same time that we pay attention to the way the Japanese have modified the model we prescribed for them some forty years ago.

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Research and Teacher Education in the American University

MARVIN LAZERSON

Despite the large number of students being prepared to become teachers in American colleges and universities, teacher education has rarely elicited much public interest or been of much concern to the American professoriate. Even during periods of educational reform, for example following Sputnik in the late 1950s and during the heyday of the civil rights movements in the 1960s, teacher education elicited only limited interest. Yet, as Americans enter the 1990s, teacher education, preparatory to entering teaching and in terms of the professional development of teachers, has become a focus of concern. The reform of teacher education is seen as central to the improvement of America's schools.

This is a rather extraordinary occurrence. In 1980, few would have predicted that a broad range of issues involving the quality of teaching, teachers, and teacher education would be a central feature of the next wave of American educational reform. Certainly there was little in the politics of educational and social reform during the 1960s, in the reaction and educational depression of the 1970s, or in the harsh criticism of social and educational programs of the early 1980s that suggested that the United States was going to enter a period of tremendous reform activity in teacher education.

Teacher Education and Educational Reform

The calls to reform teacher education are wide-ranging; they reveal the ferment engaging the field. Some of the most prominent proposals are to:

- raise admission standards and lengthen the time in pre-service residence;
- institute new licensing and certification requirements and create a national certification board for teachers;
- eliminate undergraduate education majors and require greater knowledge of academic subject matter;
- institute more apprenticeship and mentoring programs for teacher entry and development;
- institute career ladders and merit pay to hold teachers in classrooms and reward outstanding teachers;
- establish professional practice schools for teacher education and make teacher education more central to education schools;
- reorient teacher education toward the restructuring of schools with teachers playing a leading role in that process.[1]

What explains this enormous outpouring of interest in teacher education? In part, it is the result of dramatic changes in the supply of teachers. As opportunities for women have opened up, the once safe assumption that there would be a readily available supply of young women to train for teaching no longer holds. This is occurring at the same time as the teaching force is aging. Projections vary, but there is near unanimity that an exceedingly large number of new teachers will be needed during the next two decades simply to maintain current student-teacher ratios. Recruits to teaching went down substantially in the 1970s and early 1980s, as teacher salaries declined relative to other comparable fields, as conditions in schools deteriorated, and as women made other career choices. Projected demand for more teachers is fueling concern about access to teaching. This concern, in turn, is being paralleled by debate over the quality and characteristics of teachers.

Student demographics are also playing an important role. Minority students now constitute the majority in many urban school systems and will continue to do so over the next two decades. More and more students are from non-English speaking homes or homes where facility in the English language does not come easily. Simultaneously, the proportion of minorities entering teaching is declining. As it becomes apparent that more minority teachers are needed, less are being prepared. The issue of race, now deeply intertwined with that of language, means that it will take dramatic changes in the recruitment of teachers as well as in their training to establish a teaching force able to teach effectively and sensitively in multiracial and multilingual settings.

Teacher and student demographics are a kind of backdrop to the debate over teacher education. But the debate itself has been stimulated by the blistering criticism of America's schools and its teachers. The criticism has taken many forms, from *A Nation at Risk*, published in 1983, which argued that America has committed a crime against itself by letting mediocrity reign in its schools, to the fulminations of academics like Allan Bloom on the decline of American culture and intelligence. It has come through the depressing results of the National Assessment of Educational Progress on what American students do not know and through such scholarly treatises as *The Shopping Mall High School*, with its critique of the negotiations that occur in classrooms between teachers and students.[2] Over and over, the theme of the 1980s has been the same: American teachers allow shallow learning in their classrooms. To correct this, teacher educators are being told to seek better teacher applicants and prepare them to teach at a higher level of academic skills.

A fourth basis for the current wave of concern over teacher education has come from those committed to a greatly revised structure of schooling. Here the emphasis has been on teacher professionalization and the role of teachers as leaders. The argument is straight-forward: teachers should be shaping the educational reforms of the future, if only because without teacher involvement the reforms will fail anyway. To be creative and effective leaders, teachers need

the training, salaries, autonomy, and support accorded to other professionals. While most proposals to make this happen have centered on job restructuring—to prevent burnout, to establish more collaborative decision making within schools, to create career ladders and merit pay, and to give groups of teachers more freedom to innovate—the calls for restructuring schools play back onto teacher education through the demand that preparation and continuing development programs treat the teacher-as-leader seriously. The job of teacher educators is to go beyond basic apprenticeship skills and develop critical leadership abilities.

There is yet another basis for the growing interest in teacher education that comes from within the field of educational research itself. This is the increasing amount of provocative and valuable research on teaching—how teachers think, the processes they go through in planning and implementing their goals, the ways they perceive their environments and their students. A growing body of knowledge about what teachers know and how they practice has opened up avenues for teacher education barely conceivable a decade ago. It is this aspect of teacher education that I want to focus on, for it is on the relationship of research to teacher education that major research universities need to build their teacher education programs. Among all the things we ask universities to do, research is the one significant activity a university can engage in in a sustained and effective way. The issue I want to address is what kind of research can be meaningful in teacher education and professional development programs.

Teacher Education and the Research Universities

Before I turn to the current state of research on teaching and teacher education, let me say a few words about the place of teacher education at the research universities in the United States. With the sharp decline in interest in education during the 1970s and early 1980s, teacher education programs were cut back throughout the United States. Even as interest and enrollments have increased in the last few years, many

teacher education programs have remained at the margins of schools of education at the major research universities. The programs are usually taught by non-tenure track faculty, by graduate supervisors, and by teachers in the schools who supervise student practice teaching. When teacher education students are taught by research faculty, it is usually in the social foundations and educational psychology courses most removed from the students' preparation as teachers. The most prestigious faculty are frequently those most removed from teacher education. Rarely is there any presumption that research by the faculty in the teacher education program is necessary. Most education school faculty and administrators look on teacher education as serving two functions: bringing in badly needed tuition revenues and showing that the education school and the university fulfill their "service" responsibilities. Teacher education is not treated as central to the research mission of the education school.[3]

I do not want to underestimate the importance of tuition income or public service to universities; both are essential if schools of educational are to flourish. Given the low endowments that education schools typically have and their second-class status on university campuses, any program that brings in regular and large supplies of tuition revenues has a presumptive case for being retained. And research universities need service roles; they are important to the broader public, to legislators and alumni, to the professionals in a variety of fields. Despite the grumblings of dyed-in-the-wool academics in arts and sciences faculties, the service roles of the professional schools protect the liberal arts by allowing the research university to balance scholarship with utility.

Still, the case remains that teacher education in the United States has been outside the scholarly mainstream of universities and, more to the point, has been outside the mainstream of scholarship even within the very schools of education that offer it. This is a disheartening condition that needs to be changed. Fortunately, the conditions for instituting that change are ripe, and can be found in the evolving research

on teaching and teacher education emerging out of the shadows of education schools.

Research on Teaching and Teacher Education

Until recently two strands of research on teaching have predominated. Unfortunately, even where the research has been good, it has often left teachers with nowhere to go, has presented them with data that are divorced from the day-to-day realities of their classrooms, or with information that tells them little about how research can enhance practice.

The most prominent strand has been based on a research model coming from experimental psychology. It has focused on isolated and relatively easily measurable behaviors and on techniques of research design and measurement. It has been "process-product" research that asks what teacher behaviors lead to what results or outcomes with students.[4] The research questions focus on ways teachers should ask questions, on how to reinforce positive responses, on methods of improving group work among the students, and on how such things as "time on task" improve achievement levels.

Whatever the gains to research methodology and to establishing educational research as scientific, the research itself has barely touched the actual conditions and dilemmas of teaching. Pre-service teachers read the research and think that it can offer a series of recipes for instant good teaching. Experienced teachers who read it struggle with trying to find some resemblance between the simplicities reported in the research and the complexities of their classrooms.

The most recent example of this is the most frequently discussed research on teaching—the research on effective teaching. This research has been useful in focusing on classroom management issues and in isolating a few of the things teachers can do to transmit information to students. But the research's strengths are its essential weaknesses. Its model is the empirical measurement of behavior and effects as isolated entities; the behavioral principles developed as a consequence of the research design are then presumed to

be equally applicable regardless of classroom contexts, subject matter, students, or breadth of assessment beyond standardized tests. I believe that such research is inadequate to a significant improvement in teaching because it oversimplifies the contexts of classrooms and schools and underplays the complexity of the craft of teaching. It assumes a linear relationship wherein the teacher's actions cause a predictable student response in all situations, reproducible in any given classroom.

The second research strand on teaching has been sociological and observational. Willard Waller's *The Sociology of Teaching* stands as the exemplar of this research, a provocative and insightful examination of the constraints and dilemmas of the classroom teacher—from the expectations of saintliness that communities hold for teachers, to the hierarchical structure within which teachers teach, to the negotiations of individual classrooms and the undermining of self that occurs there. More recently, Philip Jackson's *Life in Classrooms* and Dan Lortie's *School Teacher* have extended Waller's observations, exploring the complexities of classroom behavior, the socialization of young people into the teaching profession, and the ways that teachers go about their business and are frustrated by it.[5]

Waller, Jackson, and Lortie represent the best of this sociological tradition of research on teaching that looks at what teachers do and reviews the data from a critical perspective toward schools. Their books are valuable, and they should be read by all education students. But the strand of research they represent has also been frustrating to teachers and would-be teachers, for it tends toward pessimism. Reading Waller, Jackson, Lortie or others in this genre is unlikely to lead students to want to be teachers, for the research stresses the isolation, the difficulties, the lack of intellectual stimulation, the flat career lines, the low public status, the limited economic rewards. Nor is this literature able to provide teachers with the skills necessary to improve their teaching. It is a literature that is insightful and at times brilliant, but it is ultimately a pessimistic literature that those

committed to teaching and teacher education must use in limited and cautious ways.

For teachers, the two traditional strands of research have been at best a mixed benefit. The sociological strand has generally been used by teacher educators with a critical stance toward the schools. But too often the message has been, "these are the sociological and structural constraints you face as teachers; make your way with that," rather than a message about how one goes about becoming a better teacher. The psychological research has given two messages: (1) There are scientific ways of analyzing teaching and learning behavior—the design and method of the research is what is important; and (2) teaching can be improved by research that uses linear causal analysis, is generalizable across teachers, and prescribes good practice. Neither the sociological nor the psychological messages have thus inspired a commitment to and faith in the value of research that has meaning to the classroom teacher who understands the complexity of her craft and wishes to have her students learn more.

Does this have to be the case? Is it necessary that research on teaching be so divorced from actual classroom complexities that it holds little meaning for teachers or teacher educators or that it be so pessimistic about what teachers can accomplish? Obviously, I do not think so. Indeed, I want to sketch three different kinds of research on teaching and teacher education that have emerged recently that hold enormous promise for how we prepare and engage in the professional development of teachers.[6]

These are:

- Research on teacher thinking and teacher knowledge
- Research on teacher education
- Research by teachers

Teacher Thinking and Teacher Knowledge. The most provocative work of the last decade has been research on teachers' thinking: How do teachers perceive a learning situation? How does what they think about affect what they do? From where do they get their sources of knowledge? What are the processes by which they move from thought to action? These are tough

questions, but as Lee Shulman points out, unless we ask these questions, unless we "collect, collate, and interpret the practical knowledge of teachers for the purpose of establishing a case literature and codifying its principles, precedents, and parables," we will have a research agenda that fails, once again, to capture the dynamics of classrooms and teaching.[7] Or, as another prominent researcher on teacher thinking puts it, "to truly understand what makes teachers effective, how teachers facilitate students' learning and achievement, and how educators might improve teaching and the process of teacher education, researchers need to study teachers' and students' thinking in the classroom."[8]

Much of the research on teaching has been initiated by classroom ethnographers, anthropologists, and linguists, in part because they admire and possess the tools of observational analysis necessary to understand the learning environment. Their willingness to ask simple questions like (in Fredrick Erickson's words) "What is happening here, specifically? What do these happenings mean to the people engaged in them?" and to pursue the complexities of the answers have opened up the windows of classroom research. Concerned with the concrete and the specific situation, they have de-emphasized the search for universal behaviors in favor of first describing situations and then comparing the details of numerous cases to search for what Erickson calls "concrete universals." At their best, the ethnographic and sociolinguistic researchers have effectively explored cultural and linguistic differences in face-to-face classroom interactions, the relationships between social structures and language use, styles of questioning and answering, and the ways classroom structures interact with subject matter organization.[9]

Even more heartening in this genre has been the research currently being done by scholars who explicitly define themselves as researchers on teaching and teachers. What they are doing can be seen in the interesting and important research by Lee Shulman and Magdalene Lampert. Shulman's research has received the most attention—in part because it has been so exceedingly well-funded and, in part, because

it has been so closely identified with efforts to establish a broad range of competency-based examinations to underlay the creation of a national certification board for teachers.

Shulman and his colleagues have been studying the knowledge possessed by teacher education students and its evolution as they become teachers. In particular, Shulman asks what teachers knew or failed to know that permitted them to teach in particular ways. That has led him to the knowledge base of teachers, and in a related series of research endeavors, to develop a set of standards by which to assess and evaluate teachers. He is interested in the content of disciplines (math, history, and so on), in the materials teachers use, in the settings in which they teach, in the broader social structures, and in what teachers know about their practice.[10]

Shulman's work is important for teacher education because assessing the relationships between the content of teaching and the processes of pedagogical reasoning and action ought to be part of teacher preparation and continuing professional development. It would be a mistake to "teach" the knowledge base of teacher action to neophyte teachers, in the sense of handing down yet another cookbook of received wisdom. But it would be a major step forward to make the discovery and analysis of that knowledge base an integral part of teacher education programs. Shulman's research thus relates directly to the improvement of teaching and teacher education. For as we begin to understand the sources of knowledge, we can begin to add them to our teacher education programs; as we better understand the processes of pedagogical reasoning, we can ask that teacher education include those processes.

Magdalene Lampert's research on teaching both overlaps with and differs from Shulman's. Lampert is a practicing elementary school mathematics teacher and a university-based research scholar. Her goal is to illuminate what she calls the "zig-zag between scholarship and practice," playing off the concrete and practical dilemmas of the classroom against the development of pedagogical theory. One of her great contributions is to show that teachers frequently have contradictory goals in classrooms and that to manage the

contradictions productively, they often have to construct solutions "in the face of unsolvable problems." This leads teachers to dilemma management, finding ways to achieve their teaching goals even though they cannot make the problems disappear.[11]

Lampert's research is exceedingly important to teacher education, for her notion of managing dilemmas and her desire to change our assumptions about research allow us to think about putting scholarly research and teacher education together. Customarily, Lampert argues:

> Many people—including teachers—believe that if only scholarship in psychology and the social sciences could come up to the levels achieved by the natural sciences, and if only, with the help of technology, individuals could achieve the ideal of control over the environment represented in such scholarship, then everyone could live happily ever after. The work of managing dilemmas, in contrast, requires admitting some essential limitations on our control over human problems. It suggests that some conflicts cannot be resolved and that the challenge is to find ways to keep them from erupting into more disruptive confrontations.[12]

If we acknowledge that Lampert's concluding sentences accurately reflect classroom situations, then research that examines the ways teachers engage in dilemma management and the sources they draw upon ought to be central to the preparation and professional development of teachers. Here the "zig-zag" between research and practice is clear. Research on teaching reveals the nature of dilemma management; awareness of that central attribute of practice ought to generate research on professional development to enhance effective practice.

The new research on teaching can thus play a vital role in teacher education. Teachers come to classrooms with strong but implicit theories about their students, subject matter, and their roles, responsibilities, and actions. Students come to the instructional situation with strongly held and

not easily modified preconceptions. Knowing these research findings should allow teacher educators to ask provocative questions about their own programs. According to Christopher Clark, "teacher educators need to make sure that they themselves ask such questions as: What are the preconceptions about teaching and learning held by our students? How should we take account of what our students know and believe as we help them prepare to be teachers? How might we structure field observations early in a teacher preparation program to make visible important aspects of teaching not usually obvious to primary school or high school students? What do prospective teachers believe about the integration of subject matter knowledge with pedagogical skills, and what does our preparation program offer to support or challenge and replace these preconceptions?"[13] These are not questions readily answered by research on teacher thinking, but they are the kind of important questions for teacher educators raised by the recent research on teaching.

Teacher Education. Research on teacher education has been much less common than research on teaching. Even today, it clearly has a back seat to the innovative and pathbreaking research on teaching itself. But it seems to me that teacher educators have some responsibility to do research on their own programs, to engage in experiments, and to ask tough questions about the processes and outcomes of those experiments.[14]

The most productive research on teacher education programs has come out of the University of Wisconsin at Madison by Kenneth Zeichner and his colleagues. Over the last decade, Zeichner has grappled with developing a teacher education program that stresses the goals of reflective teaching, teacher professionalism and autonomy, and increased teacher participation in educational governance rather than simply adopting traditional apprenticeship models of teacher training that provide student teachers with currently known pedagogical skills and techniques. These goals are not unique to Wisconsin; they are, in fact, quite similar to what the

best teacher education programs have been aiming at for a number of years.

What is unique, however, is the systematic way Zeichner and his colleagues have undertaken research on their own program. Since 1980, they have published more than a dozen articles on teacher education. In that work, they describe what they have been trying to do and show how the students' desire (and need) to gain classroom skills conflicts with the faculty's desire to have the students reflect on sociological contexts, philosophical purposes, and historical relevance. The research illuminates the tension between the faculty who teach these broader issues and the supervisors of student teaching.

Zeichner's work shows that teacher educators can be simultaneously engaged in preparing teachers and in research on it. They can assess what they do by asking sophisticated research questions that encompass the myriad dilemmas that any teaching program faces. And, by making research on the program part of the program itself, I believe the research can make the traditional tension between reflection on conceptual issues and the concrete skills of teaching a more productive part of the learning experience.[15]

Research on teacher education is thus vitally important. Calls for teachers to think of themselves as researchers—a point I consider later in this chapter—and for teacher education programs to make research on teaching part of their agenda are ultimately hollow if teacher educators are not simultaneously researchers on their own teaching programs. Beyond that, it has become clear that all of our professional education programs—in medicine, law, engineering, business, social work, nursing, architecture—suffer from the same kind of ignorance about what they do. The failure to undertake research on the preparatory programs of professional schools is itself a manifestation of how little attention we have given to how professionals practice their crafts.

Teacher Research. Perhaps the most exciting endeavor of the last five years has been the small but growing body of

research on teaching by teachers themselves, often in conjunction with university-based researchers. The growth of this research reflects the recognition at long last that good teachers are thinkers, planners, problem solvers, and dilemma managers. When teachers try to figure out what students do and do not know, when they ask why students do not understand material, when they challenge their students' knowledge and inspire them to know more, they engage in a kind of applied research. The key link has been to engage teachers in research on their teaching through their recognition that applied research is part of their daily routines. The growth of teacher-based research also reflects the recognition that without active teacher participation, researchers can only get very partial insights into why and how teachers think and act. It reflects, as well, the growing commitment to establish greater equity between the notion of research and the notion of practice.

The result is that "teachers have found themselves thinking aloud, reflecting, raising and refining questions about their knowledge and practice, writing, analyzing data, making formal presentations of research in which they have been involved, and publishing for audiences of researchers and teachers."[16] This phenomenon is to be heartily commended. It has added a dimension of formal reflection to teaching, asking teachers to put their understandings of themselves into words. And, it has been an enormous boon to professional development for it involves teachers seeing themselves as inquirers into their own classrooms and as scholars disseminating the results of their inquiries.

The best way to extend this process is collaboratively with university-based researchers and student teachers participating with experienced teachers. To cite my colleagues at the University of Pennsylvania, Marilyn Cochran-Smith and Susan Lytle, this collaborative model presumes, along with the best of the recent research on teaching, that teaching "is a highly complex, content-specific, interactive activity in which differences across classrooms, schools, and communities are critically important."[17]

But having said that, let me be clear that collaborative models are fraught with complications. There is still little clarity on what kinds of research should be undertaken—from calls to replicate traditional design and measurement studies to informal descriptions and reflections on teacher behavior and thinking. More important, deep ambiguities and tensions exist over such issues as access to publishing, the academic prose demanded by academic journals, the resistance by teacher colleagues to the role of researcher, the low regard in which research on teaching is held by other researchers, and fundamental questions about the purposes of the research and who is to gain from it. And there is the issue of whose questions are to be studied.

The latter is no small issue. Cochran-Smith and Lytle describe the dilemma as follows: "In traditional university-based classroom research, researchers' questions reflect careful study of the existing theoretical and empirical literature and, sometimes, negotiation with the teachers in whose classrooms they collect data. Teachers' questions, on the other hand, often emerge from discrepancies between theory and practice: initially these are experienced as a concern about a student's progress, a classroom routine that is floundering, conflict or tension among students, or as a desire to try out some particular new approach." This questioning process is "highly reflective, immediate, and referenced to particular children and classroom contexts." The research dilemma is to synthesize the search for generalizable patterns built into the academic researcher's disciplinary commitments with the teacher's quite concrete need to problem solve in a classroom. The goal is to generate questions about the relationships between the concrete incidents and concerns of classroom life and the more general and abstract knowledge to be gained from the research. As Cochran-Smith and Lytle put it, "The unique feature of the questions that prompt teacher research is that they emanate solely from neither theory nor practice, but from critical reflection on the intersection of the two."[18]

We are now doing this at the Graduate School of Education at the University of Pennsylvania and, if I may, I want to

use our program to illustrate how collaborative research can be used to reshape teacher education programs. Project START (Student Teachers as Researching Teachers) is a multiple case study of a cohort of pre-service student teachers and their school and university mentors. It seeks to explore the relationships of oral and written language and student teachers' theories and theories-in-action, particularly their theories about reading and language teaching and learning. Student teachers, cooperating teachers, and university faculty drawn from six quite different elementary schools meet weekly at school centers to reflect, read, and write about issues of educational theory and practice and to participate in monthly seminars that bring together teacher-researcher groups from the six school sites. Through collaborative classroom inquiry projects, dialogue journal writing, and joint seminars, in addition to student teacher meetings and supervisory conferences, student teachers develop the skills and knowledge of effective teachers, the inquiry stance of reflective teacher-researchers, and a critical perspective on teaching, learning, and schooling.[19]

Project START is thus an innovation in teacher preparation *and* a collaborative research project on teaching. It is also itself being studied by Marilyn Cochran-Smith as research on teacher education. As a program, it provides a rich, intensive, year-long student teaching experience integrated with education courses and life in schools and classrooms. It provokes pre-service teachers to question their teaching experiences in relation to both classroom teachers and university-based educators. As collaborative research, it stimulates experienced teachers, student teachers, and university teachers to articulate research questions designed to improve practice. As an object of research itself, START documents and interprets practice and the learning that occurs when practice is reflected on and related to theory. Among the questions asked are: What kinds of issues and problems do pre-service and in-service teachers address and how do these change and develop over time? What kinds of knowledge and problem-solving strategies do cooperating

teachers and teacher educators share with student teachers in their oral and written language interactions? How do student teachers write about, talk about, modify, and use their knowledge over time? In what ways does the knowledge of experienced teachers compare with the knowledge base generated by university-based researchers? In what ways does written and oral language function, as pre-service and in-service teachers frame and reframe their questions and observations over time within a community of learners?

These are important questions for researchers; they are also important questions for teachers. The answers are important to teacher education programs, for they can be used—in Cochran-Smith's words—"to construct a model of teacher education that redesigns the traditional student teaching experience by moving away from a narrow view of cooperating teachers and supervisors as authorities whose primary task is to impart expertise to student teachers and judge their performances and instead encourages a broader view of cooperating teachers and supervisors as experts who are also coaches and collaborators who demonstrate and describe for student teachers the reflective inquiry processes in which they engage as they strive to construct, interpret, and implement educational theory."[20] To accomplish this is to transform teacher education (and professional development) by diminishing the historic gap between research and practice.

Conclusion

If teacher education is to remain in research universities in the United States and is to become central to schools of education in those universities, research must be an integral part of the preparation and professional development of teachers. It is essential to have professors who study teaching and teachers more productively. But we will need to go beyond that. We in education schools need also to exemplify the act of research. We must lay out our research with all

its ambiguities, complexities, frustrations, and limitations as part of becoming and being a teacher. Teachers are, first and foremost, asked to teach. But if we are to move toward reflective teachers, toward a growing role for teachers in the shaping and reshaping of schools and educational policy, teachers need to participate in the emergence of a knowledge base on which to act. The research universities must make the case through example that research on teaching and teacher education is fundamental to being a teacher; that is the basis on which we justify our role in teacher certification.[21]

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21. I want to thank Marilyn Cochran-Smith for her thoughtful comments on an earlier version of this chapter.

Part II: Teacher Education in Peoples' Democracies

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Teacher Education in the Soviet Union: Processes and Problems in the Context of Perestroika

VALERI M. PIVAVAROV

The position of teachers in the USSR, and indeed in Russia prior to the 1917 Revolution, has been invariably marked by two contradictory characteristics. On the one hand, the teacher is seen by the state as its functionary and purveyor of the prevailing philosophy and ideology, and as such is held in high official esteem. On the other hand, while there was much respect for teachers in 1917 when only about a quarter of the population could read and write, they had lower financial and social status than other professions. Moreover, respect for teachers and teaching as a profession among the population paradoxically tended to wane as the country advanced toward widespread literacy and greater access to education. While teaching did attract many able young women and men in the past, the abler people now opt for more exciting and rewarding opportunities in fields opened up by advancements in science and technology—a situation not unknown to other industrialized countries.

The Best Location for Teacher Education: Institutes or Universities?

Higher education in the Soviet Union is much more specialized than in many other countries. Secondary school grad-

uates wishing to embark on higher studies have to decide on their specialty and occupation before they apply to a higher education institution and sit for entrance exams. In other countries there can be a considerable difference between a student's bachelor's and master's courses, but in the USSR, with its one-tier structure of higher studies, a choice has to be made at the very start. For instance, a student is not normally trained only as "an engineer"; he or she enrolls in an institution that trains engineers for particular industries. This is despite the fact that for about three years the curriculum for most engineers is roughly the same and specialization only takes place afterwards—within the chosen industry.

The same applies to teacher education. Students do not enroll in a department or school of education but rather in a department of physics, geography, philology, and so on. Consequently, aspiring teachers must know well in advance what their desired future subjects will be, for two subjects are normally required. Changing of specialization during the course of studies is rare because of obvious differences in the content of specialization.

Elementary and secondary teachers are trained in selective pedagogical institutes and universities, although a majority of elementary teachers is still prepared in secondary institutions, as I will show below. There is some discussion as to which form of education results in a better teacher. Pedagogical institutes are not unlike the teacher training colleges in England and the United States that are now rapidly becoming extinct. They provide what their supporters say is a well-conceived concurrent, target-oriented program that mixes knowledge of subject matter and pedagogy and enrolls highly motivated individuals. The students have made their career choice and want to be trained to be teachers.

For their part, universities train future scholars and scientists. However, in a one-tier, five-year university course wastage may be quite considerable, particularly because of imperfections built into entrance examinations. The widespread criticism of the entrance examination system is centered on the undue psychological and physical stress it

causes, and on its high premium on rote learning of facts and textbook definitions to the detriment of original thinking. It follows then that not all university graduates will in fact become scholars and researchers. Therefore, most university graduates, for instance, in addition to having "Historian" inscribed on their diploma, also have a convenient "Teacher of History" entry.

From the forgoing it will understandably appear that the basic goals of education in pedagogical institutes and universities are different. It is the goal of pedagogical institutes to train professional teachers who are firmly grounded in their specialized subject matter and in ways of communicating it to their students. Universities, on the other hand, expect students to become research-based professionals in a field of knowledge. Most university students do not learn the techniques of projecting their knowledge to school children, although curricular provisions are there for them to do so. Yet there are some similarities between the two institutions. Indeed in terms of learning basic subject matter, prestigious pedagogical institutes are quite comparable to less prestigious universities. Moreover, during the pre-Gorbachev stagnation period quite a few pedagogical institutes became universities at the insistence of local leaders who needed another status vignette. Yet for better or worse they remain pedagogical institutes for all intents and purposes, i.e., they offer fewer specializations than universities and often these are of poorer quality. As a consequence, many graduates of pedagogical institutes with a teacher of maths diploma are employed as mathematicians or as computer programmers, while not a few university graduates achieve their modest living standard because they have an additional teacher qualification.

A Model Teacher Education Program in a Pedagogical Institute

In a pedagogical institute students are told from the first day that they are future teachers, even if their main objective

is to learn the subject rather than to teach it in the schools. The program focuses on the vocation of teaching and immerses students in it from the first of the four or (usually) five years of training. That being the case, some educators argue that the sheer amount of specialized subject matter knowledge could be reduced substantially—down to the bare essentials of the school curriculum, according to extremists. The extra time could then be put to good use providing professional teaching skills, as opposed to specialized knowledge. According to this argument, there is no use overburdening future teachers of English, for example, with too much linguistics if they cannot survive in a classroom setting of unmotivated children whose chances of ever using English, albeit considerably expanded, are still statistically negligible. To assure teachers a professional education, more "relevant" subjects should be offered.

Of course the tension between acquiring knowledge and the means to teach it exists in many countries, and in the Soviet Union we do not make claims to epoch-making discoveries on how to resolve it. Yet it may be instructive to describe the actual composition of a model teacher education curriculum.

For the purposes of analysis I shall examine the curriculum for intending teachers of English approved for pedagogical institutes by the former Ministry of Higher Education. (Recently the Ministry merged with two other agencies—for secondary and for vocational education—to form one State Committee for Public Education.)

The curriculum covers five years of studies and consists of five content areas unequal in size and totalling 3,642 hours of instruction in an institute, plus two months of teaching practice and one month of compulsory summer camp counseling. The curriculum features such areas as specialized subject matter, pedagogical and general knowledge as well as electives and optional subjects in all of these areas. Since optionals are not included in the total time, and electives constitute only 2 percent (70 hours) of the program, I shall leave them out of the calculations.

The lion's share of the curriculum (2,570 hours or 72.3 percent) is devoted to learning English as the discipline to be taught at school, plus a few supplementary subjects. The number of hours devoted to each subject are given in parentheses. It should be mentioned that intending English teachers have already had six years of English in secondary school. The speciality-related section of the curriculum features modern Russian (150); introduction to linguistics (70); Latin (70); English: oral and written practice (1,130); practical phonetics (320); practical grammar (320); history of English (70); theoretical phonetics (30); theoretical grammar (30); lexicology (60); style (40); theory and practice of translation (40); text interpretation (20); history of English-language literature (70); British and U.S. studies (geography, culture, history, economy, and so on) (70); comparative typology of a native language and English (40).

General or social subjects (504 hours, or 14.2 percent of the curriculum) are history of the Communist party (120); Marxist-Leninist philosophy (140); political economy (100); scientific communism (80); Soviet law (40); introduction to scientific atheism (24).

Pedagogical subjects (480 hours, or 13.5 percent of the curriculum) feature introduction to the profession of teaching (36); developmental physiology and school hygiene (54); psychology (100); pedagogy (160); methods of foreign language teaching (110); instructional aids and technology (20).

The number of, and the curricula for, electives and optionals are determined by individual institutes on the basis of their possibilities and student demand. The model curriculum is developed centrally with institutionalized input from the republics and provinces represented on central scientific councils existing under the State Committee. Eminent scholars and administrators, as well as some classroom teachers, are members of these councils. An important note accompanying the model curriculum states that institutes have the right to reduce the number of hours allotted to each subject, or amend the sequence of their appearance, on condition that intending teachers "master the required

volume of scientific knowledge." The notable exception refers to social sciences which must be covered within the specified time.

Each semester (the first runs from September until Christmas; the second from 10 February until late May) the students sit for a number of exams, usually from two to four. The exams are preceded by a similar number of preliminary graded, or more often non-graded (pass-fail), exam-type tests, written or oral, for which they get credits necessary to be admitted to the semester exams. In the course of the five-year program the students sit for as many as 33 exam-type tests and 30 exams. They also must write two course papers, sort of mini-dissertations, in a chosen subspecialty, for example in lexicology or phonetics.

At the end of the five-year course there is a choice between taking three state exams or writing a diploma paper and sitting for two exams. Graduates become certified teachers the moment they receive their diplomas at the graduation ceremony from the hands of the dean or rector. They can then teach throughout the Soviet Union without having to prove their qualification to local educational authorities. The only limitation that can be imposed is the language barrier, but there are schools with the Russian language as the medium of instruction in all urban communities.

The model curriculum may sound ominous but it has many local variations which are only natural in a multiethnic country. Different national languages, usually about fifty, are used in the country's schools, although the figure changes each year as schools in some minority languages are opened or closed, depending on the demand. Non-Russian languages are widely used in pedagogical institutes training teachers for non-Russian schools and local differences can be found in the curriculum. For example, intending teachers of English in Moldavia have an easier time with English articles, since they exist in the Moldavian language, which suggests the practicality of studying the comparative typology of one's mother tongue and a foreign language. Local ministries of education also have inputs into the model curriculum of individual pedagogical institutes and universities, and the

latter have their own important influence on curricular matters. It is when these institutions fail to fully utilize the power they have always had that difficulties occur, for example, when there are not enough native language teachers or not enough schools for non-Russians.

Theory Versus Practical Skills

The ratio of general, pedagogical and subject-matter-related disciplines respectively is 14.2: 13.5: 72.3 percent. It is even more biased toward the latter two groups if eight weeks of teaching practice (technically 288 hours of observation and teaching) and at least one month of summer camp counseling are added. The social sciences are not all that prominent in terms of time allocation, yet much is now happening to bring them in line with the new political thinking. What worries some people about the model curriculum is the modest share pedagogical subject have in it.

A look into the structure of the "psychological-pedagogical" area of the curriculum, which totals 260 hours, reveals that it features the following (the hours devoted to each field are in parentheses): general psychology (70); developmental and educational psychology (30); methods of upbringing (20); history of education (60). Figures apart, there is widespread disaffection with both the quality (on the students' part) and quantity (on the professors' part) of the pedagogical area. The students and "progressive" teachers claim pedagogy—general principles and philosophy of education—should be taught more imaginatively. Subject matter professors begrudge the time devoted to it. Proponents argue that one of the strong points of the Soviet system has been that it ensured intending teachers a solid theoretical and methodological base. These "fundamentalists" believe it is a shame that pedagogy is given so few hours. Opponents, representing the innovative element, claim that even those few are too much in view of the content of pedagogical courses. They would be prepared to see expanded pedagogical courses if they included more of the current thinking which,

among other things, stems from the practice of innovative teachers and more controversial theoreticians. Fundamentalists, for their part, wish to further strengthen the scholarly-theoretical base of pedagogy along traditional lines—with little success so far and few chances of succeeding. Pedagogy, at least the way it has been taught, fails to inspire the hearts and minds of future educators, built as it is around a few stilted and outdated principles presented in a rather scholastic fashion. The students almost unanimously refer to pedagogy in its current form as "the least useful subject of the entire course," "a waste of time," "a collection of banal assertions not confirmed by classroom practices," and so on.

The teaching of pedagogy will not be abolished, of course, although it seems to be happening in other countries. Rather, Soviet educators will follow initiatives pioneered elsewhere and will introduce more pragmatic approaches based on psychology and technologies of teaching. Indeed, psychology has gradually been growing in prestige, starting from the low base it had when it was to all intents and purposes abolished in the late 1930s as part of the drive against "pedology." According to educational psychologists, it still has a low profile. According to teachers, the problem of psychological training lies in its unduly theoretical nature—at the expense of applied techniques vital for classroom survival. Unlike critics of pedagogy, critics of psychological training wish to see more of both theory and sorely needed practice. In fact, the idea of eradicating teachers' "psychological illiteracy" has become firmly established.

To do teachers justice, they live in a society that has underrated the importance of psychology, despite some first-rate research of worldwide repute. Matters are beginning to move with a renewed emphasis on psychology and its diffusion in society: more students are admitted to departments of psychology, and psychologists are increasingly hired by industries. Still there is a paucity of psychological services compared to other industrial societies.

Proponents of no-nonsense pragmatic approaches to teacher training stress obvious links between applied psychology and teaching styles and techniques. Practical skills

in handling classroom situations are suggested as a way out of the current unpreparedness of beginning teachers to face the brave new world of not-so-well-disciplined students. The fundamentalists argue that this practicalism would weaken the scholarly soundness of teacher education. They would grudgingly accept more practical skills training on top of the theory, not instead of it.

The situation should not be viewed as altogether hopeless. The autonomy that pedagogical institutes have to establish and run their own electives and optionals makes room for unconventional offerings such as "teaching craftsmanship" workshops, empathy-stressing role games, and so on. All in all, the ages-long confrontation between "theory" and "relevance" is likely to develop in favor of the latter in a few years to come. With new rights being acquired by institutes and an emphasis on diversity, chances are that we are entering a period of change.

Interestingly, the emphasis on concurrent study of scholarly disciplines and practical immersion has long been stressed. What is known as "continual school practice" is a case in point. From the first year intending teachers must visit schools and make themselves useful in such roles as youth counselors and assistants for pastoral tasks. The idea is to get students involved and professionally motivated, not altogether unnecessary in view of the inadequate motivation of many of them. The system has as many proponents as it does opponents; a great deal depends on the quality and relevance of this kind of program—on whether it is in an institute-attached school or in a school indifferent to future teachers. Intending teachers do in fact get morally prepared for actual teaching practice in the fourth and fifth year. The success of continual practice in schools will depend on developing new content and tasks; regardless, continual practice will definitely stay on.

On the other hand, we are not likely to witness any deep cuts in the bulk of specialized subject matter, believed to be essential for teachers, even though teachers have to learn things that are not meant for school consumption. One of the reasons is that teacher education may lose its shrink-

ing appeal even further if it fails to provide training that is marketable outside the country's classrooms.

Teachers' Educational Qualifications

How well are teachers qualified for their jobs in terms of formal education? The worst off are elementary teachers; only about 45 percent of them have four or five years of higher education to their credit. The others are graduates of secondary pedagogical schools that offer a general secondary education while training pre-school and elementary teachers. The goal is to ensure higher education (roughly equivalent to a U.S. master's degree) for all elementary teachers. But secondary pedagogical schools are growing in number, and despite substantial gains in higher education qualifications on the part of elementary teachers, many of them will continue to be 19-year-old graduates of those lower level institutions.

The standards are much higher for secondary teachers with 96 percent of them being graduates of higher education institutions. The nonqualified teachers, about 4 percent of the nation's nearly three million teachers, are usually transients on temporary jobs in hard-pressed out-of-the-way places who failed to enter institutions of higher learning or who want to try teaching before making their final occupational choice. In any case, nonqualified teachers must be enrolled in correspondence studies, and about 300,000 are following their higher education courses extramurally or at evening departments. Quite a few of them are graduates of secondary pedagogical schools.

Technically all diplomas are equal but in fact their quality differs. Some diplomas obtained from large metropolitan centers are more highly valued than those received from less prestigious institutions. However, many provincial institutions of higher learning have justifiably high reputations. The language barrier, rather than the quality of diploma, will prevent a teacher of the Uzbek language and

literature from finding employment in Moscow—unless an Uzbek-medium school is opened there, which some people claim would be a good idea for Moscow-based Uzbeks.

The annual turnover rate for teachers stands at about 3 percent. Teachers with up to five years of experience account for 20 percent of the teaching force; with five to twenty years of experience, for 60 percent; with over twenty-five years of experience, for 20 percent. Consequently, an average teacher has abundant experience.

Intending Teachers: Who and Why?

Studies of motives for enrolling in teacher training programs show that nearly 50 percent of candidates for teaching look forward to a non-educational occupation after graduation, while 16 percent have little choice available; a pedagogical institute is still often the closest higher education institution to be found, even in rather small towns. Many enroll in institutes because of specialized subject matter interests that frequently are not linked to similar interests in teaching the discipline. Such motivation results in considerable wastage, particularly over the past two years as the institutes have become less dependent on the numerical strength of student contingents for the size of their faculty. Before that, institutes had to fire a lecturer if a few students were expelled for poor performance. Recently financial limitations in regard to faculty-student ratios have become more liberal, even though it is known that not all institute students will become teachers.

Up to 30 percent of beginning teachers have low motivation for teaching. This accounts for considerable defection from the profession in the first three years of teaching, while nearly one in ten qualified teachers opts for greener pastures immediately after graduation. Also among immediate defectors are many young women who do not assume teaching duties for family reasons such as childbirth or their husbands being moved to another town or city.

The prevalent number of females in the profession (75 percent) is even more pronounced in pedagogical institutes (80 percent). As in many other countries, teacher training programs are still favored by young women of humble origins. Often they are the first generation of white-collar workers in their families.

A recent pay hike of nearly 30 percent, the only tangible result of the 1984 school reform, according to disgruntled critics, brought about a temporary increase in the number of men enrolling in pedagogical institutes. Yet the gain and the relative edge in pay over other professions did not last. An unforeseen result of the pay increase was that many teachers with high seniority suddenly had respectable incomes. As often as not, they were not the best teachers and may have wished to leave the profession but decided to linger, if only for the money.

The chances of increasing the proportion of men in the profession—and a more equal representation of sexes is widely believed to be desirable for a more balanced education—may improve if schools and teachers are given more freedom of choice in terms of the curriculum and have less paper work and pressure on them to do as they are bidden. In fact, young male teachers often leave teaching, not because they dislike it, but because of undue pressures and limited opportunities for professional self-actualization. It comes as no surprise that many of the innovative teachers who are currently in the public eye are men—the toughest survivors with a sense of purpose.

Teachers' Status

In the days before the Revolution there were at least two classes of teachers—"gentlemen" teachers who taught at the very selective secondary schools (*gymnasia*) and "people's teachers" who taught in the much more accessible elementary schools. Differences in pay and status served to emphasize their different social roles. The former were very much servants of the ruling classes and recognized as almost part

of them, while the latter were more often than not "of the people" and indeed worked for ordinary people, sharing with them what life had to offer.

All this ended in the wake of the sociopolitical and economic changes brought about by the Revolution. Class-based differences among the ranks of teachers were abolished, but class-based distrust for the former *gymnasia* teachers persisted for quite a while after the Revolution. Being the most democratically inclined section of the educated classes, elementary teachers, and not a few secondary teachers, saw their mission as serving their nation and its rising generations. Those Soviet citizens who went to school in the 1930s and 1940s fondly remember some of their teachers for a combination of strictness, diligence, and tolerance, always hallmarks of a "good teacher" in the Russian mind.

To all outward appearances the teaching profession is fairly homogeneous today. But, just as we have already noted differences in educational standards between elementary and secondary teachers, we should also not pretend that there are no differences between a central school in Moscow frequented by diplomats' children and one a few thousand miles away. Rural and urban teachers would also be as different as their respective communities still are. It is normal for rural teachers to cultivate their plots of land and have cows and chickens and generally live the lives of other farming community members. Opinions differ as to the wisdom of this arrangement. Critics say it is not compatible with teachers' status; supporters say there is much sense in being just like everyone else.

Rural teachers belong to a minority of college-trained professionals in farming communities and as such are called on to be active in local life as deputies to village councils and other public officials. A village school principal is normally a member of the team of local community leaders. Yet rural female teachers often marry below their newly acquired status for they often come from and marry in the same community; city dwellers rarely change their addresses for the countryside, the opposite being the case.

There is much brave talk in the wake of the current reform-oriented turmoil about such matters as pay differentiation, differentiated staffing patterns, and hierarchy. What differences exist in material terms under nation-wide pay scales arise from formal education credentials, seniority, and different workloads above the statutory 18 hours per week norm. Teachers are also paid more for accepting the pastoral duties of a homeroom teacher or for serving as a deputy principal. Grading papers brings in a little extra money. Rural teachers are provided with houses or get a subsidy to cover the costs of renting a private house; their fuel bills are subsidized. Like other citizens, they are entitled to hardship pay for relocations in the north of the country.

What little hierarchy there is can be found in the titles of Senior Teacher and Methods Teacher, extremely few and far between as they are. Introduced about ten years ago, they did not really catch on due to rather vague criteria. On the other hand, social recognition symbols are more widespread. The title of Merited Teacher is not uncommon, the honorary title usually being given to experienced and dedicated teachers who are prominent in their communities. A fairly recent honorary title of People's Teacher of the USSR, a still higher distinction, is supposed to be reserved for the best from the very best, and thus is extremely rare. And, of course, many teachers are decorated for their services to the country since thousands of them are members of legislatures, including the national parliament.

The current infatuation in the USSR with vertical differentiation or merit pay is bound to come up against the same nearly insurmountable obstacles as in other countries. Evaluation criteria are vague, the social atmosphere of school is often not conducive to objective assessments, and it is always difficult to identify a good teacher and to agree on who should make the judgment. The only valid criterion is repeatedly high achievement on the part of the students. The few teachers who are able to demonstrate consistently superb performance are already well-known national figures with all the relevant titles. Yet some teachers do a better job than others, hence the attempts to remunerate them.

One of the proposed controversial solutions for differentiated pay is for schools to establish their own financial base in addition to government budgets. It is expected to come from local industries, from the schools' own economic activities, and even from parents' donations for things "above and beyond" the state-provided "social optimum." The proposed tri-partite school councils, representing teachers, students, and parents/local community, would be responsible for the distribution of additional pay. Negotiated contracts are also suggested whereby a teacher would be able to argue that he or she should be paid more than the normal pay rate rather than accept the result of collective bargaining anonymously done on the teacher's behalf in Moscow. Substantial bonuses for "final results" are discussed as a way to encourage teachers to try harder.

Advocates of these solutions are little aware of their pitfalls. A lot will depend on the school's ability to broaden its financial base. Yet the search for alternatives is a healthy sign that education is on the move.

Where Do We Go From Here

The long overdue processes of rethinking what the Soviet Union is after in this world, associated with ideas of new political thinking, democratization, and openness, have involved the country's educators in countless, sometimes caustic, debates, panel discussions, and exchanges in the media. Turmoil in the educational research establishment was apparent. The most recent school reform (1984) had been one of the last major events of the old way of thinking and fell far short of the expectations of many in the field and in the society at large. When Mikhail Gorbachev says there is much foot-dragging about educational reform, he is only referring to the practical aspect. Philosophically substantive issues were discussed by the ruling Communist party at a special session of the Central Committee in February 1988. At that time the message was sharply brought home that

the goals of school reform should be harmonized with the process of *perestroika* (restructuring) that has been getting under way in the country.

In the major report to the 1988 plenary session it was revealed that many classes for younger children are run on a two- or even three-shift system. Twenty-one percent of Soviet schools have no central heating (and climatically most of our south is closer to that of midwestern United States!), while 30 percent have no mainline water and 40 percent, no mainline sewage. More than 40 percent of schools have no gymnasium. A hundred and forty thousand teachers are without state or cooperative housing and have to rent on the private market. The proportion of income spent on education by the government fell from 11 percent in 1970 to 8 percent in 1986.

These black and gray statistics, familiar as they are to the practitioner, could be continued. Yet an important theme, both before and since 1988, has been the school reform's failure to include a fundamental democratization of the education system. "Even now a large number of teachers and lecturers are terrified at the possibility of stepping outside the framework of conventional, officially sanctioned ways of proceeding. More socialism means more diversity." These sentences, central to the new way of thinking, were marked in bold type in a recent issue of *Pravda.*

Some tangible results of the reform processes are in evidence. Despite a relatively conservative frame of mind on the part of the masses of teachers, some are in the forefront of *perestroika.* New members of the State Committee for Public Education are intelligent and able. Many important and high-ranking officials are anxious to bring about change—to assure some decentralization, to depart from the rigid and almost entirely uniform federal curriculum, and to give regions, schools, teachers, and students a measure of choice. The range of choice is a hot issue but the consensus is that about 70 percent of instruction time should be devoted to a substantially revised and updated federal curriculum, while the rest should be determined locally including long-recognized but not always properly used ethnic prerogatives.

The sweet taste of freedom to come makes many young teachers' heads dizzy, while sober-minded educators, who have seen many ill-fated reforms, have their doubts. Moreover, fundamentalists and even pragmatists point to certain highly industrialized countries with as many as 23 million functional illiterates and ask adherents of radical change difficult questions about permissiveness and unlimited respect for individual desires in education.

Teacher education is bound to change alongside overall changes in schools and in the country as a whole. Parallel to rival school reform concepts, a new plan is being developed for the country's teacher training system with renewed emphasis on relevance and skill but not to the detriment of scholarly soundness.

Clearly, the country's educational and teacher training systems are in for a period of painful change the dimensions of which will be shaped by the depth of sociopolitical and economic transformation. Hopefully, they will never be the same again.

Endnotes

1. *Vysshaja shkola kak faktor izmenenija sotsialnoj struktury sotsialisticheskogo obshchestva.* [Higher Education as a Factor of Changing the Social Structure of the Socialist Society] (Moscow: Vysshaja shkola Publishers, 1980).

2. F. R. Filipov, *Sotsiologija obrazovanija.* [Sociology of Education] (Nauka Publishers, 1986).

3. E. K. Ligachov, report to the February 1988 meeting of the Central Committee of the Communist Party of the Soviet Union, *Pravda*, 18 February 1988.

4. G. A. Yagodin, report to the All-Union Congress of Educational Workers, December 1988, Progress Publishers, 1989.

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Teacher Education in Revolutionary Nicaragua

ROBERT F. ARNOVE and *ANTHONY DEWEES*

Teacher education in Nicaragua must be viewed in the context of the dramatic social changes that have occurred since the 1979 revolution. The new Sandinista regime that assumed power in July 1979 initiated national policies to overcome decades of underdevelopment and to transform a political system that excluded the majority of the population. Congruent with radical changes in society, the education system was called on to contribute to the formation of a "new person"—a more critically conscious, participatory citizen, motivated by collective goals—and the transmission of the skills and knowledge to set the nation on the path of self-sustaining economic growth.

Challenges and Constraints

Faced with massive illiteracy and an urban-based primary school system that reached only two-thirds of the relevant age group, the Sandinista political and educational leadership embarked on a policy of expansion, improvement, and reordering. The new system of "popular education," as a current Ministry of Education publication notes, "is essentially and necessarily linked to the strategic political project of FSLN [The Sandinista National Liberation Front] . . . for the building of a new society."[1] The strategic project has been defined by American educator Valerie Miller in this way:

> Concerned with more than simply equity with growth, the leaders of the *Frente Sandinista* shared a general development orientation that was socialist in character. Although interpretations of the precise meaning of this orientation were rich in variety and number, FSLN members did agree on certain common points. Development and transformation, they believed, depended in the short run on national reconstruction and in the long run on a transition to socialism.[2]

The greatest demands for transforming education in accordance with the general ideological and programmatic thrust of the revolution are placed on teachers. Teachers are expected to possess extraordinary qualities, not only with regard to knowledge and pedagogical ability but also with regard to political awareness and ideological correctness—qualities that will inspire their students. According to the National Association of Nicaraguan Educators (ANDEN):

> Teachers have an important mission in our society because of our politico-ideological role, because we ought to be agents of transformation, leaders in the community and classroom, who forge by example patriotic and revolutionary values in . . . the high-level human resources required to develop the country according to the Strategic Project of the Revolution.[3]

Attracting and retaining committed and capable teachers with these qualities has been a major challenge to the Ministry of Education (MED). At the time of the revolution, there was a poorly prepared, largely uncertified teacher workforce—68 percent of secondary school and 73 percent of primary school teachers were unqualified. Although MED estimates the shortage of teachers in 1979 to have been as high as 12,000, there also were many unemployed teachers who had been denied the opportunity to work because of their opposition to the Somoza regime that had governed the country since the mid-1930s.[4]

To augment the supply of primary education teachers, the government increased the number of normal schools from

5 to 13.[5] Similarly, university-level education programs were expanded to increase the supply of secondary education teachers. The government further has systematically allocated a substantial portion of stipends and scholarships at the secondary and higher education levels to students entering teacher preparation programs. As a result of these efforts, the number of primary and secondary school teachers has more than doubled, from 12,706 to 27,400, since 1978. To improve the status and economic conditions of teachers, the government has taken several major initiatives. In June 1984, MED made a historic announcement: for the first time in the country's history, teachers' salaries would be equivalent to those of comparable professionals. The salary agreement reached between ANDEN and MED essentially doubled the salaries of teachers. Moreover, the workload for primary school teachers was reduced to 25 hours per week, and for secondary teachers from 40 to 34 hours.

Since then, however, the intensification of the United States-backed counterrevolution and the economic warfare waged by the United States has had a crippling effect on the Nicaraguan economy and the provision of basic social services.[6] Over the past five years, the theme of national reconstruction has been replaced by that of national survival.

The counterrevolution has had tragic consequences for educators. Teachers, along with health workers and agricultural cooperative members, have been singled out for attack by contra military forces. More than 400 teachers (mostly uncertified adult education instructors) have been killed in combat or assassinated while teaching. Schools and health centers, similarly, are military targets—46 schools have been destroyed and another 21 seriously damaged. In the war zones, the image of the rural teacher with chalk in hand and a rifle slung over the shoulder is an accurate one.[7]

In addition to the difficult and dangerous conditions under which teachers must labor, inflation (running over 200 percent in 1985 and 1986, and in the thousands from late 1987 on) has seriously eroded their wages—despite subsequent wage hikes and several more rounds of increases in 1987 and 1988. Street vendors of uncontrolled items like cold water often

make in a week what a teacher makes in a month. Teacher salaries (which include the provision of certain basic commodities at prices substantially below those of the marketplace) are currently not enough to live on. To survive economically, many primary school teachers now have to teach two or more sessions, while secondary school teachers are allowed to teach another half-session.

Although many extremely committed and self-sacrificing educators have continued working despite these trying conditions, there has been a large-scale exodus from the teaching profession. Attempts to recruit and retain teachers have been compared to efforts to fill a "barrel without a bottom."

Other serious problems that beset the profession—for example, the continuing high level of uncertified teachers (*empirismo*)—will be addressed in the following sections that describe and examine the organization, content, and delivery of teacher education by conventional and alternative programs. These problems and the programs that have emerged to overcome them in Nicaragua are similar in many ways to those in other underdeveloped countries. However, the specific historical situation in Nicaragua in the post-1979 period—a situation of revolutionary transformation and counterrevolutionary reaction—has led also to unique difficulties and solutions.

Paths to Certification and Professionalization

Within the general policy guidelines provided by the highest levels of the FSLN and the Ministry of Planning, MED is responsible for organizing, coordinating, and supervising teacher education. It is the only certifying body in the country.

The completion of a teacher education program at the appropriate level constitutes the sole certification requirement. Primary school teachers must successfully complete a five-year training program—or its equivalent—at one of the country's 13 normal schools; students may enter normal

schools after graduating from primary school (grades 1–6). Secondary school teachers (grades 7–11) must have a university degree in their teaching area.

The pre-service preparation and certification of teachers is only part of the story. In-service professionalization and certification of educators engages a substantial portion of MED efforts to improve the quality of education in the post-1979 period—as a majority of practicing teachers (61 percent) are *empíricos*. Uncertified teachers, however, comprise a heterogeneous group. In addition to those who have not achieved the necessary educational level for certification, there are others who have superior educational qualifications but lack specific areas of content to be certified. For example, high school or university graduates are still considered *maestros empíricos* if they are teaching at the primary level and did not complete the preparatory program at a normal school. Different continuing education options, therefore, are offered at both the normal school and university levels.

The priority given to in-service professionalization by MED is attested to by the fact that over 90 percent of noncertified teachers are currently pursuing certification. This figure, provided by the National Association of Nicaraguan Educators, is remarkable in light of the enormous constraints occasioned by the counterrevolution and the difficulties of transportation in the country.

Pre-service Primary Teacher Programs. The training institution for primary school teachers is the normal school (*escuela normal*). Students receive a general secondary education while preparing to become teachers. Students attend classes on a daily basis the first five semesters (studying nine or ten courses, 35 to 40 hours weekly, per semester). During the second semester their second year, students begin a limited practice teaching experience of 3 hours a week. The first semester of the third year the practice teaching component is increased to 5 hours per week; the second semester is entirely devoted to a 35-hour-a-week practice teaching experience.

After this three-year period, students can begin to work as uncertified teachers. The certification process continues through four additional semesters. These are offered in a combination of 15 Saturday classes or one-month intensive sessions (daily classes) during school vacations. At the conclusion of this process, teachers must complete a one-year period of social service in teaching to receive their title as primary school teachers (*Maestros de Primaria*).

The increase in the number of normal schools and their placement in all regions of Nicaragua represent significant efforts to combat the chronic shortage of trained personnel in the most educationally neglected areas. The MED also hopes that the decentralization of teacher preparation institutions will contribute to lessening the constant turnover of teachers, who in the past come from the more populated and developed regions of the country.

Alternative Primary Teacher Programs. Even with the expansion and decentralization of training programs, the supply of teachers has not kept pace with the rapid expansion of the educational system and the demographic and political realities of Nicaragua. Between 1978 and 1988, total educational enrollments (at all levels, including adult and special education) increased from under 500,000 to slightly over 1,000,000; since 1984, slightly over one-quarter of the Nicaraguan population has been enrolled in various modalities of formal and nonformal education.[8]

In response to this educational demand, a series of alternative forms of professionalization have been implemented or are in the planning stage. One option has enabled practicing teachers to attend Saturday classes at the normal schools closest to their homes. This program differs in length and content depending on the characteristics of the teachers. Those individuals with only a sixth grade education must study for an additional six years of alternating semesters of Saturday study and intensive one-month semesters given during vacations. The content of professionalization courses for these teachers is designed to elevate their general educational level to the equivalent of a graduate of the ninth

grade (*ciclo básico*), while upgrading their knowledge and skills in the foundations of education (for instance, psychology and philosophy) and in subject area methods. A practicing teacher with a ninth-grade education will study two years and perform one year of social service for certification. A high school or university graduate will receive certification after one year of study and one year of social service.

Although the strategic placement of normal schools throughout the country has enhanced the capacity of MED to provide continuing educational opportunity for in-service teachers, there are still serious problems. The cost of transportation and materials has affected adversely the number of teachers who are able to complete their training. The most remote areas, where needs are greatest, do not have public transportation. Arranging private transportation can easily cost up to 40 percent of a teacher's monthly salary. In addition, the related food expenditures and the purchase of school materials can claim as much as 20 percent of the monthly salary.

In response to these difficulties, normal schools have also taken on the function of becoming peripatetic or mobile (*escuelas normales mobiles*). Teams of teacher trainers from the normal school travel to the more isolated population centers of the region to offer Saturday professionalization courses.

Although all regions of the country have these *normales mobiles* (including the densely populated Managua region), their impact is greatest in sparsely populated states like that of Chontales. The Gregorio Aguilar Barea Normal School, for example, has its center in Juigalpa, and three branches in Nueva Guinea, Boaco, and Rama. Of the 1,516 individuals enrolled in teacher education courses, only 214 are regular daytime students. To meet the needs of the remaining 1,302, including a number of secondary teachers, the faculty has spent long hours traveling in one of the regions most severely affected by the war. In recognition of its exemplary work on behalf of the most disadvantaged sectors of Nicaragua, the national government conferred on the school a

very prestigious national award, the "Orden José Benito Escorbar." In describing the work of the school, Miguel de Castilla Urbina, a former vice-minister of education, noted that it is ironic that the Mobile Normal School does not even have a single bicycle.[9]

Another innovative response to the teacher shortage, particularly in rural areas, has been to use members of the Sandinista Youth Organization and other politically militant youths. In 1983–84, 1,600 secondary school students were sent to Cuba to be trained as teachers in an intensive one-year course. Members of this special group, the Fiftieth Anniversary of the Death of Sandino Brigade, volunteered to serve anywhere in Nicaragua for a period of two years. They taught in primary schools and in the program of adult popular education. Subsequently, the Georgino Andrade Education Brigade (named after a martyred literacy worker) was formed. This brigade, consisting of approximately two thousand popular educators, a number of them graduates of adult education programs taught by predecessors of the Fiftieth Anniversary Brigade, went to Cuba for a one-semester training program, and returned to teach the first grades of primary education in their home areas for at least one year. In some cases, they comprised a majority of teachers in the regions most affected by the counterrevolution. Although this approach to the formation of teachers has been discontinued, many of the youths serving in these brigades have subsequently incorporated themselves into the teaching force and are undergoing the process of certification.

Pre-Service Preparation of Secondary Teachers. Secondary level educators receive their training at the university level. Since the post-1979 reorganization of the Nicaraguan higher education system, only the National Autonomous Universities (UNAN) in Managua and León, and the newly established joint campus with the Central American University in Estelí, are authorized to offer the B.S. degree in education (*Licenciatura en las Ciencias de Educación*). Graduates receive certification in a specific subject area: for example, *Licenciatura en las Ciencias de Educatión con*

Mencíon en Matemaítica). The UNAN faculties of education offer the following content area specialities: Spanish, mathematics, biology, chemistry, physics, geography, history, social sciences, English, French, school administration, and pedagogy (only offered at UNAN/Managua, and apparently being phased out).

There are several pre-service routes to obtaining a *licenciatura* in education: full-time students, who study by day, are able to complete their course work in four years, while night students follow a five-year course of study. At the present time, however, only UNAN/Managua has day students, who represent approximately one-third the number of night students.

Pre-service programs further require a two-month practice teaching experience and one year of social service in those areas of the country in greatest need of educators. Some students are exempted for family or health reasons, but the vast majority (over 80 percent) of both university and normal school graduates complete this obligation.

Alternative Programs for Secondary Teachers. Uncertified secondary teachers, like primary teachers, are expected to attend Saturday professionalization courses.[10] Even those teachers who are high school graduates must study five years for their *licenciatura* and certification in a subject matter area. However, as they are already working in education, the years of social service and practice teaching are not required.

Secondary teachers experience greater difficulty in completing certification programs. As professionalization courses are offered only at the three university campuses (located in Managua, Leoń, and Estelí), they usually must travel greater distances than primary school teachers, and at considerably greater cost.

In response to these problems, several new avenues to professionalization have been instituted, and others are currently being planned. These new programs have two common elements. The first is the notion of *Educatíon por Encuentro* (education by encounter) in which the subject

matter is presented in modules. Students and teachers meet periodically (for example, twice a month) to discuss the material, take exams, and outline the independent work that will be reviewed at the next get-together (*encuentro*). This format, designed to reduce transportation problems, may cut by one-half the travel costs for program participants.

A second common, and innovative, element is that of *afinidad laboral* (work relevancy). Both pre- and in-service teacher education programs will attempt to relate training content to the regional context in which the teacher is working; *afinidad laboral* may also lead to professional courses aimed more selectively at individuals working in priority areas of the local economy.

The modality of *Educatíon por Encuentro* is currently replacing that of weekly Saturday classes on the campuses of UNAN/Managua and UNAN/León. A modified version of this modality, distance education (*Educación a Distancia*), has already been used in three areas: Puerto Cabezas, Bluefields, and Juigalpa.

Puerto Cabezas and Bluefields, port cities on the Atlantic Coast, are not directly linked by road to any of the existing university centers. Juigalpa is the capital of Chontales, a vast, sparsely populated and relatively isolated region. Before these programs began in 1985–86, there was essentially no opportunity for in-service secondary education teachers to study for certification or to systematically improve the quality of their instruction.

The first graduates of the program completed their fifth and last intensive tutorial session (*encuentro*) in Puerto Cabezas in March 1988. In December 1988, the first graduates from the other two programs completed their sessions, which are roughly equivalent to a three-year course of teacher education. The graduates of this distance education program receive the title of *Profesor de Educación Media,* certifying them as teachers for the first three years (grades 7–9) or first cycle of secondary education, but they do not receive the more inclusive *Licenciatura en Educatíon* (for grades 7–11).

The results of the program are currently being analyzed by the university faculties of education for application to their professionalization courses. One obvious difficulty is the low retention rates of distance education programs: of the 153 students starting the Puerto Cabezas program, only 44 graduated. The other two program sites show similar rates of attrition.

The probable causes of the high desertion rate include the length of time between *encuentros* (between four and eight months); the fact that a number of students who are not teachers also enroll in the courses to further their education; and the practice of certain state agencies working in related areas (such as health) assigning employees to the program to augment their knowledge and skills. Despite these difficulties, it is likely that a modified version of distance education will be used as a system that enables isolated teachers to continue with their professional improvement and acquisition of credentials.

Content and Methods of Teacher Education

As noted in an earlier section, the post-1979 education system, which has as its overriding goal the formation of the "new man and woman" for the new society, is based on different notions concerning the nature of the educational process and the role and attributes of an educator. Deriving their purposes from Marxist notions of a "polyvalent education" (an education that combines productive labor with academic studies, recreational activities, political socialization, cultural awareness and expression), schools are called on not only to impart a scientific and materialistic conception of the world but to form values that will motivate individuals to relate to one another in more altruistic and cooperative ways. Since these values are to be developed through critical analysis and the active engagement of students in the transformation of the social and natural worlds, then classrooms themselves must become more active places and the learning process must necessarily be more partici-

patory. The teacher's role is to facilitate and guide the overall development of the student and to serve as an exemplar, in and outside the classroom, of those values that the revolution is promoting. The curriculum and the practices of teacher education institutions, indeed their ambience, reflect in part these new educational tendencies. They also reflect the difficulties of establishing academically rigorous and pedagogically exciting programs that will help contribute to the transformation of political culture and to an increase in the level of scientific and technological knowledge of the populace.

To a certain extent, teacher preparation programs in Nicaragua resemble those of any other country: at both the normal school and university levels, students have required courses in general studies, disciplines relevant to the content areas they will be teaching, and the foundations and methods of education. What is different is that, as part of their general studies, they take courses in the history of the revolution and philosophy from a scientific materialistic perspective. These courses are presented within a framework of social class analysis. For example, in the opening unit of the history course for the professionalization of primary teachers, the initial themes are the "expansion of imperialist powers" and "integration of the Nicaraguan economy into the capitalist world market." Central questions throughout the succeeding historical periods are these: "In this period who were the controlling interests?" and "What is the basis of our dependent economy?"

Although the nature of pedagogical/technical courses differs between normal school and university faculties because of the inherent differences between teaching primary and secondary students and the educational level of the prospective teachers, there are, nonetheless, common themes and content. The same themes and perspectives form part of the alternative delivery modalities for primary and secondary school teachers. Pedagogy courses systematically employ historical dialectical analysis, making such comparisons as the following between education in socialist and in bourgeois and capitalist societies: "the principle of a polytechnical edu-

cation is far removed from the bourgeois pedagogy . . . where an antagonism is cultivated between manual and intellectual labor." Not only is an emphasis placed on the study of the sciences, but a "scientific" approach is encouraged—an approach that involves an emphasis on formal theory and definition of terms and content. At times, this formalism would appear to contradict an emphasis on critical analysis and personally meaningful engagement of learners in interpreting everyday reality that is constantly changing.

Content of Primary Teacher Education. Prospective and in-service teachers receive classes in the methodology of the principal subject areas of primary schooling—Spanish, mathematics, natural sciences, social sciences—as well as in the management of multi-grade classrooms and the education of adults. These latter courses are offered because most rural classrooms and even many schools in areas surrounding cities operate with multi-grade classes; and because of past educational neglect of marginal populations by the Somoza regime, a large number of over-age students have been incorporated into the school system—students requiring more appropriate content and methods.

On the Atlantic coast, where indigenous groups constitute approximately one-third of the population and the national government is committed to a policy of bilingual education in English and Miskito for the first four years of primary schooling, the regional normal schools have initiated efforts to prepare pre-service and in-service teachers with requisite concepts and skills. The Center for Investigation and Documentation of the Atlantic coast (CIDCA) has worked with a number of North American and European university linguists to gather oral histories and develop readers in Miskito, English, and other coastal languages, such as Rama. However, large tracts of the Atlantic coast, particularly North Zelaya—where Miskito is spoken—have been war zones, and linguistic training workshops have not been as systematically conducted in those areas as in the largely English-speaking area of Bluefields.

Bilingual education, like multi-grade and adult education, is an area of teacher education that will require more systematic attention in the future. Similarly, with attempts to introduce the middle-school concept at the upper grades of primary education, and an attempt to focus the lower level of secondary education away from its college preparatory emphasis, there will be a need for a corresponding shift in the content and methods of normal schools and university faculties of education.

Generally, the methodological orientations imparted in teacher education programs are taken directly from the study plans for academic subjects. And as the national curriculum undergoes revision, which has been the case for the past three years, methods classes are updated to reflect new content and pedagogical orientations. These plans facilitate a standardization of content across all the centers of teacher preparation and delivery modalities; but there are also efforts to experiment, as in the normal school of Jalapa, with adaptation of curriculum to local circumstances and the formation of a teacher who will have curriculum development skills.

The total number of classroom hours for each of the subject areas varies slightly, depending on the program (regular day student versus in-service professionalization), with Spanish comprising 72 hours of instruction and the other subject areas between 45 and 60 hours each. Day students complete their methodology courses by the second semester of year three (grade 9), the point at which they are involved in full-time practice teaching.

In the methodology classes, students study the particular curriculum and also the teacher guides for particular units of instruction. These guides, known as *complejos didácticos*, are viewed as useful for the orientation of both young and experienced teachers; but a number of high-level educational authorities also are aware that these *complejos* often act as straitjackets on innovation.

Methodology courses, along with general and subject area courses, consistently contain patriotic and specifically polit-

ical messages related to the history of the revolution and current national mobilizing themes—such as the struggle for peace with dignity. Congruent with the national political model that emphasizes participation, teachers in all courses strive to structure active learning environments and use teaching strategies that exemplify attributes of the "new education." In any class, for example, students may be called on to review key concepts covered during the hour or be required to discuss their agreement or disagreement with certain points advanced by the teacher.

The entire ambience of normal schools, the material culture—what is posted on classroom walls and hallway bulletin boards—and the extra- or co-curriculum, with its own powerful expectations, contribute to the overall professional and political socialization of future teachers. As a case in point, students may be exhorted to actively participate in local literacy campaigns, join production brigades, or volunteer for militia duty. Similar expectations and mobilizations occur at the higher education level.

Content of Secondary Teacher Programs. As noted previously, licensed secondary teachers hold university level degrees with certification in a particular content area. The program of study varies according to the specialization. Common courses include one semester of the history of the revolution and two semesters of philosophy, which respectively represent some 80 and 128 hours of classroom time. Students in the "sciences of education" also receive a set of professional education classes that shows only minor variations by field of specialization. These courses are the following (hours studied are in parentheses): general psychology (64), general pedagogy (64), educational psychology (64), teaching theory (80), educational theory (80), educational administration and supervision (64), methods of educational inquiry (64), special methods for specialty areas (128), and educational statistics (64). Given the faculty structure of Nicaraguan universities, and of Latin American universities traditionally, general studies and subject area

courses are offered within the Faculty of Sciences of Education, rather than in a college of arts and sciences or in a university division for first or second year students.

An important consideration affecting the future supply of teachers in certain fields is that a number of students enter education because they are unable to gain admission to more competitive or rigorous academic programs. For example, students who wish to pursue a career in mathematics are likely to find opportunities restricted—unless they decide to study mathematics education or accounting. Therefore, even though there has been a substantial increase in the number of pre-service and in-service mathematics education students (for example, at UNAN/Managua from 4 percent in 1982 to 12 percent in 1988), many have no intention of becoming mathematics teachers. A similar pattern appears to obtain for biology education majors, who comprise the largest block of students, followed by those preparing to become Spanish teachers; by contrast, physics and chemistry continue to be undersubscribed.[11]

The field of education, as is so often the case in higher education systems around the world, represents an alternative—and occasionally easier—path to university entrance and graduation when other routes are not available. This situation is even more likely in Nicaragua, given the desire of higher education authorities to accommodate as many education majors as possible, and also provide financial assistance to them.

Persistent Problems

In light of these tendencies and the difficult circumstances surrounding teaching, it is not surprising that only one-third of the approximately three thousand graduates of university education programs are currently working in education. Indeed, a recent informal study of UNAN/Managua education majors found that the further students progress through their studies, the less likely they are to want to teach.

Problems in the recruitment and preparation of teachers at the university level have repercussions for the lower levels of the education system. For it is in the universities that

the teachers for normal schools are prepared. If the quality or commitment of these graduates is less than desirable, then future primary teachers also are likely to be in short supply and not very well prepared.

The shortage of teachers is compounded by sizable attrition in normal school enrollments. Preliminary data for the first semester of 1988 indicate that of an initial enrollment of 10,466, only 4,030 were still in the education system by the second semester, and approximately 45 percent of this remaining group had not received passing grades during the first half of the year. Attrition was highest in the northern and central regions of the country affected most directly by the external aggression.

Because of the physical dangers and economic difficulties experienced by teachers, especially with the worsening economic situation in 1988, the exodus from the occupation has accelerated. During the first seven months of 1988, approximately 5,000 (out of a total of 34,000 teachers and administrators at all levels of the school system) tendered their resignations or were dropped from payrolls because of administrative streamlining (*compactación*).

Beyond the general shortage, there are acute deficiencies in particular subject areas at the secondary education level, notably in the sciences and mathematics as well as in foreign languages. Moreover, there is still no comprehensive or systematic approach to the preparation of technical school teachers, who are largely recruited on an ad.hoc basis from the ranks of practicing technicians and professionals.

Generally, the MED considers the quality of teachers at all levels of the education system, including teacher education institutions, to be deficient with regard to substantative knowledge, pedagogical skills, and ideological-political formation. Indeed, didactic, if not authoritarian, styles of instruction as well as dogmatic repetition of slogans and imposition of political ideas are viewed by more sophisticated policy makers and teacher educators as manifestations of a lack of "scientific" preparation.

To improve the quality of teacher education a number of policies are under consideration. The success of some proposed measures, such as raising the entry level into

primary teacher education programs (currently grade 6), will depend on the long-term increase in the overall educational level of the Nicaraguan population. Others include short-term measures to increase the social recognition and status of teachers. Whether pronouncements from high-level political and educational leaders on the Day of the Teacher, or an increase in the number of national level awards for meritorious service (broadly defined by ANDEN to include syndicalist and political militancy), or a national law recognizing teachers as professionals will have more than symbolic value is problematic.

In the meantime, tremendous emphasis is placed on political commitment and patriotism, as well as on local initiative and creativity—the very factors that contributed to the victory of the Sandinista forces and the success of such mass campaigns as the 1980 National Literacy Crusade.[12] Some six thousand teachers, for example, have formed a "Pedagogical Movement" to help resolve collectively the most pressing educational problems they face, such as lack of teaching materials or understaffed schools, and also to help recruit, with the assistance of the Sandinista Youth Organization, promising youth for the teaching profession. Parent groups and mass organizations have come together with educators to see how they can help alleviate problems, such as the high cost of transportation and basic consumer items, especially food; in some cases, farming cooperatives have provided land to teachers so that they could grow their own food.

Experiments in teacher education also are under way. In Managua, for example, the Alesio Blandon Normal School has proposed establishing a laboratory school in a nearby primary school that would be staffed with exemplary teachers who would also hold faculty appointments in the normal schools. The goal is to expose pre-service teachers to a model of teaching-learning more closely approximating notions of what the new education system should be. At a more advanced stage is the reform initiated in the Normal School of Jalapa, which, as mentioned earlier, is attempting to actively engage teachers and students in the development and

adaptation of the teacher education curriculum to the circumstances in which future graduates will be working. The teacher education program aspires to prepare educators who are inquiry-oriented problem solvers.

While these grass roots efforts and experiments may help alleviate immediate pressing problems and also establish bases for improved education, there are likely to be continuing tensions and contradictions in teacher education that stem from the very process of transition to socialism.[13] These tensions result from expecting teachers to be critically inquiring and politically conscious leaders in the classroom and community, while also urging them to adhere to the guidelines and correct political line being propounded by a vanguard (the FSLN), and to have their students do the same. The autonomy of teachers as professionals, and the independence of the National Association of Nicaraguan Educators, is circumscribed by this situation, particularly when the nation is under seige. ANDEN, itself, is caught in a double bind: to be an effective union, it must forcefully articulate and press for increased teacher wages and improved working conditions, but as a mass organization following the lead of the vanguard FSLN, it cannot take a sectarian stand that places the interests of teachers before national needs—and at the moment sacrifice is very much the order of the day.

Conclusion

Since the 1979 revolution, the Nicaraguan education system has undergone a dramatic expansion, and major initiatives have been instituted to transform the content and methods of teaching-learning. The new education system requires an increase in the number of teachers and a qualitatively different type of educator. Extraordinary demands are placed on teachers in the areas of substantive knowledge, pedagogical skills, and politico-ideological awareness and militancy.

It is likely that too much is expected of teachers who are poorly prepared and working under extremely difficult cir-

cumstances. Perhaps teachers should be expected "simply" to impart accurate knowledge and basic skills that will prepare individuals to be active, life-long learners—but this is no simple task and would require exceptionally well-prepared, sophisticated teachers.

It would be totally unprecedented if the Nicaraguan education system, in the brief period of nine years, were able to substantially transform the political culture; significantly increase capital accumulation; and greatly enhance autonomous national development. The experience of other revolutionary societies indicates that change in school systems typically lags behind economic and political changes; the recruitment and training of teachers and the revision of curriculum takes years and does not always lead to the desired outcomes. In the case of Nicaragua, the imperatives of educational reform and improvements in teacher education are greatly constrained by an externally sponsored counterrevolution and by the precarious economic and political position of the country in the world system. As one vice-minister noted in 1988: "If you look at all the difficulties that educators have encountered, and the lack of resources they have—it's a miracle that things are going as well as they have."

Endnotes

1. Ministry of Education, "Popular Education: Theory and Practice in Nicaragua," mimeographed paper (Managua: MED, October 1986), 3.

2. Valerie Miller, *Between Struggle and Hope: The Nicaraguan Literacy Crusade* (Boulder, Colorado: Westview Press, 1985), 30.

3. National Association of Nicaraguan Educators, "La Educación Sigue Siendo el Campo Privilegiado de Confrontación Ideológica: Documento Sintesis" (Managua: ANDEN, 24 April 1987), 9–10.

4. Many of them were permanently lost to teaching, but others were subsequently incorporated into the education system, some of whom have gone on to play leadership roles.

5. There is disagreement over the number of normal schools actually functioning in 1979 due to the destruction of school facilities and the disruption

of educational activities occasioned by the war to overthrow the Somoza regime. If the institution preparing physical education teachers is included, the number of post-1979 normal schools would be 14.

6. In 1984 allocations to the health and education sectors were essentially frozen. In 1987 these two sectors accounted for 25 percent of the national budget, with over 50 percent going to defense. Prior to the external aggression, the military received only 18 percent and the social sectors more than 50 percent of the budget.

7. To this image must be added that of the teacher with hammer in hand. In Río San Juan, for example, teachers along with community members have built all the new schools in the province, including the normal school (made of bamboo).

8. At its height in 1984, a system of literacy and post-literacy instruction, known as Educación Popular Básica (EPB), enrolled as many as 190,000 students; by 1988, enrollments had declined to approximately 72,000. One of the innovative features of EPB has been the use of over 16,000 uncertified volunteer teacher-animators. For further discussion, see Robert F. Arnove, *Education and Revolution in Nicaragua* (New York: Praeger, 1986), Chapter 3.

9. Miguel de Castilla Urbina, in *Barricada*, "La Orden JBE para los Maestros de 5ta. Región," 21 August 1988, 2.

10. Because of teacher certification requirements, secondary school teachers have the highest rates of *empirismo*—estimated at over 75 percent of those working at this level of the school system.

11. Another factor contributing to mismatch between students' career interests and the fields they actually enroll in is that students must choose a major at the very outset of their entry into the university.

12. For further discussion, see Robert F. Arnove, "The 1980 National Literacy Crusade," in *National Literacy Campaigns: Historical and Comparative Perspectives*, ed. Robert F. Arnove and Harvey J. Graff (New York: Plenum, 1987).

13. Arnove, *Education and Revolution*, 138–43; and Martin Carnoy and Joel Samoff, ed., *Education and Social Transformation in the Third World* (Princeton, New Jersey: Princeton University Press, 1989).

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Teacher Education in the People's Republic of China

LYNN PAINE

Teacher education in China, described simply in structural terms, sounds a lot like teacher education in much of the rest of the world, particularly in developing countries. Pre-service teacher preparation occurs in separate institutions for elementary and secondary teachers (called, respectively, teacher training schools and teacher training colleges), and teacher preparation generally occurs in specialized institutions, not in comprehensive secondary or tertiary schools.

The curriculum of pre-service preparation combines a mixture of general education courses, work in the students' subject specialization (for prospective secondary teachers), professional education course work, and a practicum. Time required for academic study in specialized subject areas (in teacher training colleges this represents work in the major) far outweighs that allocated to professional education.

Pre-service institutions are inadequate to supply qualified teachers for the nation's schools, given the demographic pressure China faces. In-service teacher education thus shoulders an important and heavy burden. In-service education includes a range of activities, most of which are locally designed and operated. These involve teachers on a short-term, long-term, and degree-granting basis. This education is targeted to reach a large population of teachers in order to provide compensatory education, updating, and professional enrichment.[1]

Together pre-service and in-service teacher education form part of a national plan for a comprehensive system of teacher education, outlined in Exhibit 1.

Enumerating these features of Chinese teacher education tells us little. To understand their meaning, we need to examine the foundation on which they stand. This foundation includes the context, history, and cultural assumptions of teacher education. Only with these can we see more clearly how the structure fits together; only then can we speak of teacher education as part of a social and institutional context, one experiencing a particular dynamic of change. In this chapter, I will explore the context of China's teacher education as a way of understanding its structure and content.

The Context of Teacher Education

Teacher education in China occurs within a national context distinguished by four central features: scarcity, socialism, tradition, and change. Because of China's relative poverty, educational prerequisites such as school buildings, texts, and teachers cannot be taken for granted. Teacher education has existed in the People's Republic of China (PRC) against a background of struggle over scarce resources for all social enterprises. Hence, for example, only teachers at the senior high school level can be expected to have received a bachelor of arts degree. It is hoped that junior high teachers have the equivalent of an associate's degree and elementary teachers, a specialized secondary normal school degree. Yet China's transition to socialism following the 1949 founding of the People's Republic has meant that, despite scarce resources, education has been seen as a vital force in ideological transformation.

The political significance of education to national goals has had an indelible impact on teachers and, hence, on teacher education. Political turbulence has weakened the institutional capacity of teacher education, while expectations for the political and ethical standards of teachers continue to be high. Further, despite a recent revolutionary past, China's

education is significantly shaped by the country's longevity. Traditional cultural attitudes regarding teachers, teaching, and—indirectly—the preparation they require continue to influence teacher education. Finally, formal programs of teacher education today must respond to an urgent call for change. National development strategies established in the late 1970s and early 1980s aimed at modernization, including their goal of quadrupling output value by the year 2000, inevitably present a challenge for tomorrow's teachers.

These four features of China's current situation in many ways define the context and content of teacher education. They represent what we might call the *national* context. But another way to look at the context of teacher education, the approach most often used by Chinese educators, is to consider the *educational* context—that is the situation of teachers and schools.

Teachers in China suffer from political vulnerability, a weak economic position, and a relatively low social status. Together these factors make teaching an unattractive occupation, and teacher education suffers accordingly. Despite a Confucian tradition purportedly respectful of teachers, teachers of children and adolescents traditionally have been poorly rewarded for their work. This is summed up by a popular adage that, paraphrased, recommends, "as long as there's rice in the house, don't be a teacher."[2] The establishment of the People's Republic did little to improve this situation, as recurrent periods of political mobilization (particularly the anti-rightist campaign of 1957 and the Cultural Revolution of 1966–76) placed teachers in vulnerable and even dangerous positions. Criticized, suspected, and persecuted, teachers were frequent political targets.

The weak economic position of teachers compounds the problems of the profession. Always moderately compensated, today China's teachers receive wages that rank them eleventh of twelve occupations.[3] In addition, recent bonus and incentive structures put in place for industry have no real counterpart in schools. As a result, teachers' economic standing has worsened in recent years. Workers' benefits such as housing and health care are notoriously poor for teachers.

Exhibit 1. **Overview of Teacher Education in China**[1]

	Institution	*Type*	*Number*	*Enrollment*	*Purpose*
Pre-service education	Teacher training college (*shifan yuanxiao*)	4-year (*Benke*) B.A. degree	73	211,014	Prepare senior high school teachers
		2–3 year (*Zhuanke*) A.A. degree	187	296,949	Prepare junior high school teachers
	Total		260	507,963	
	Teacher training schools[2] (*shifan xuexiao*)	4-year specialized high school degree	1,059	651,262	Prepare elementary teachers
In-service education	Education colleges (*jiaoyu xueyuan*)	Short-term and degree granting			Provide in-service education:
		Provincially administered	36	247,122[3]	For senior high school teachers
		District and municipally administered	180		For junior high school teachers

In-service				
Teacher refresher schools (*jiaoshi jinxiu xuexiao*)	Locally administered	2,099	881,027	In-service for elementary teachers
Additional in-service programs:				
Correspondence programs	Degree-granting/university administered	N/A	280,000	In-service for secondary teachers
Television teacher education college	Central government administered			In-service for elementary teachers
School programs	Individual school administered			In-service for all teachers

Notes:
1. Data are for 1987 unless noted.
2. This includes the 58 normal schools that prepare kindergarten teachers.
3. Data for 1985.

Sources: Nianjian 1987; *Nianjian 1982–1984*; *Renmin Ribao*, 5 August 1986; Wang Congfang, 134; *Zhongguo Jiaoyu Chengjiu 1980–1985*, *Zhongguo Jiaoyubao*, 22 December 1987, 1.

Even a recent 10% wage increase granted all teachers does not keep pace with double-digit inflation, officially estimated at 17%, the highest China has experienced since the founding of the PRC.[4] In short, the economic and material returns for teaching are poor.

A third aspect of the teacher situation—their social status—is also relatively unattractive. The Cultural Revolution's reviling of teachers and the more recent emphasis on commercial enterprise have combined to make teaching a poorly valued occupation. Although the mid-1980s found active efforts on the part of the state to improve teachers' social status, news reports give evidence of abuse and violence against, as well as general disrespect for, teachers.[5]

These conditions adversely affect recruitment into teacher education and teaching. For years teacher education has been unable to attract the most academically capable students. Instead, teacher training colleges have more often acted as a last-chance entry to college for students whose entrance examination performance would otherwise have denied them the opportunity to enter higher education. Because of stipends available only to teacher candidates, teacher education programs have also disproportionately attracted poor and rural students otherwise excluded from further education. Thus, those who go into teacher education often are motivated by reasons other than interest in teaching. Interviews and surveys of teacher training college students have found that a minority (ranging from 4% to 23%) hoped to become high school teachers.[6] The problem is compounded by the high numbers of teacher education students who locate or are placed in nonteaching jobs after graduation. Central government officials responsible for teacher education decry the waste resulting from teacher education graduates avoiding teaching positions.[7]

The persistent problems associated with the teaching profession have their institutional effects as well. The low social value placed on teaching exacerbates tendencies found in other countries—that is, the tendency of university faculty to distance themselves from the work of teacher education.[8]

In China, teacher education institutions are clearly second-class citizens in the educational hierarchy. Their resources evidence this problem.[9]

The context of the teaching profession affects the institution of teacher education, recruitment, and retention, as well as the quality, motivation, and morale—and hence standards—of participants. But another feature of the educational context also has important consequences for teacher education; this is the situation of China's schools. Two aspects should be noted.

First, the scale of China's educational system is enormous; in 1987 there were 182 million elementary and secondary students and 8.7 million teachers.[10] Analysis of recent patterns of growth indicate acute shortages of qualified teachers. Deng Xiaoping, China's most powerful leader in the post-Mao era, estimated in 1980 that adding two to three million new teachers would not be too many.[11] The expansion of pre-collegiate education of the 1960s and 1970s, prompted largely by political agendas, did not involve corresponding growth in teacher education programs. While the elementary and secondary student population between 1958 and 1978 grew by 69.3% and 453.2% respectively, institutions preparing new secondary teachers only increased by 58.9%, and those preparing elementary teachers actually decreased by 2,430 students or 0.7%.[12] The teacher shortage produced by the 1960–70s expansion is being further exacerbated by the impact of China's first compulsory education law, issued in 1986, and the attendant increases in student enrollments in elementary and junior high schools that are expected to result. The teacher shortage phenomenon of the late 1970s and 1980s explains the important role of in-service teacher education, as well as its subject matter emphasis and relative neglect of pedagogy. (Most in-service education is aimed at practicing teachers who themselves have not completed a level of education higher than that at which they are teaching.) And the shortages of teachers, particularly at the secondary level in history, geography, biology, physical education, music, art, foreign languages, political science, and

vocational education, explain the predominance of short-term, rather than sabbatical-length in-service work.[13] Teacher shortages strain schools that want to give teachers study leaves.

The other point that should be stressed about schools is the role cast for them in China's development plan. Education is described as having a "strategic role" in China's modernization process.[14] This adds political, symbolic, and real urgency to the need for well-educated teachers. The landmark reform published in 1985 as the Decision on the Reform of the Educational System (hereafter called the Reform Decision) describes teacher education as "fundamental" to the success of educational reform, to the strengthening of China's workforce, and to socialist modernization.[15]

Associated with these reforms is increased concern for a national system of standards and credentials. For teacher education, certification has for the first time become a goal. In the past, there was no bureaucratic measure of qualifications other than completion of a teacher education program or equivalent years of schooling. Today, with credentials playing a larger role in China's economy, the state is calling for external standards of teacher qualification. Although previous political periods challenged the legitimacy of "experts" and certificates of competence, now these are desired, and by 1988 the state was moving toward establishing a system of teacher examination and certification. Central authorities are designing the examination for secondary teacher certification, while local education authorities, rather than institutions of teacher education, will grant certification of elementary teachers, but the impact is sure to be felt within the teacher education community.[16]

In summary, then, what is the environment in which teacher education exists in China? It occurs in a context of scarcity mixed with urgency: qualified teachers are in short supply but acutely needed if China is to fulfill its political goals of socialist modernization. Teacher education also takes place in a social setting that discourages able students from entering, and institutionally is housed in schools with lower status than their academic counterparts. These problems are very

real, they have a history, and they are exacerbated by larger changes in the broader political economy.

A Short History of Teacher Education in China

The context accounts for much of the institutional character of teacher education in China. Historical developments within teacher education also explain some of the institutional character, as well as the content, of teacher education.

The history of China's teacher education is characterized by a persistent tension between moral and technical goals, which relate closely to divergent views of the roles and obligations of teachers. As we see from the brief historical outline that follows, China's teacher education over the past forty years has been pulled between political and technocratic models, with earlier solutions producing problems that inspired radical responses. Over time, shifts in the direction of teacher education have been abrupt. These have had significant consequences for teacher education's capacity, content, and orientation.

The history of teacher education in China, as with that in other countries, must be understood within the history of education as it reflects national economic and political developments. In China's case, because education plays a pivotal economic and political role in national development, education is the target for reform with each major change in the economic or political environment. In short, China's turbulent recent past has had a significant role in shaping teacher education today. This is perhaps especially true of the formal pre-service teacher preparation that takes place within higher education, since higher education is so often the focus of specific attention, so clearly the level at which technology and politics strike the uneasiest balance, and thus so consistently conflictual and vulnerable to change. It is pre-service teacher preparation in which we see most sharply the contradiction inherent in the need to create students who are both "red and expert."[17] Tertiary level teacher education has been a particular arena of conflict and

deeply influenced by the historical working out of this balance of political commitment and technical expertise. While major shifts have occurred, particularly at the time of shifts in China's development strategy, there remains a familiar continuity to the issues raised in the debates, a continuity that reveals deep-rooted ideological conflicts and underlying contradictions.

The Roots of Teacher Education in China. The establishment of formal teacher education, beginning with the first teacher training college in 1897, suggests some of the historical paradoxes and challenges inherent in China's teacher education. Teacher education was a foreign concept. It was introduced as part of the influx of new ideas about "modern" schooling that took place in the late nineteenth century as the result of missionary contact, overseas study, and an indigenous internal critique of China's weakness. Traditional approaches to schooling had relied on a Confucian notion of the teacher; before the twentieth century the majority of teachers were employed for their knowledge of the classics. As candidates (prospective, failed, or otherwise) of the civil service examination, their legitimacy rested on their mastery of a canon of literary and philosophical writing. Formal teacher education was only seen as important by those espousing a foreign, so-called "modern" vision of schools, an approach to schooling that divided knowledge into disciplines and included a practical orientation to the curriculum.[18] Not surprisingly, there were few (only twelve) colleges of teacher education in the country on the eve of Liberation in 1949. The larger function of preparation of teachers was included in the broader mission of comprehensive colleges and universities.

The birth of the contemporary teacher education program more accurately dates from the early 1950s and the readjustment of higher education that attended the establishment of the People's Republic. After Liberation, the function of schools was to become more narrowly and precisely defined. Teacher education, like the rest of the educational system, experienced an official emphasis on its

technical utility, an increased institutional specialization, and a growing dominance of Soviet patterns of organization and content. It was presumed that there was a scientific model for training skilled talent. Educational planning grew more rational, centralized, and bureaucratic.

The 1952 national readjustment of colleges and departments took a heretofore rather undifferentiated population of higher education institutions and transformed them into specialized colleges and universities with clearly distinct missions. This produced teacher training colleges with a narrow, professional focus and a specialized curriculum. Secondary teachers were to be prepared there, not elsewhere. The curriculum, heavily influenced by Soviet experience, combined academic course work in a discipline with core courses in politics, education, and a teaching practicum. There were only required courses, no elective ones.

Yet, from the beginning the actual number of people participating in formal teacher education was quite low. While there had grown to be thirty-seven tertiary-level teacher training colleges by 1953, it was known that these institutions would be far from able to produce the approximately 100,000 teachers needed over the next five years.[19]

Popularizing Education: The Great Leap Forward. By the late 1950s, conflicts prompted by contradictions between the goals of economic efficiency and egalitarianism surfaced dramatically in national politics. For teacher education, the importance of technical expertise and technical definitions of quality receded as the political principles of the Great Leap Forward (1958–59) came increasingly into play. Where previous educational policy had stressed the need to develop students with political commitment and technical skills (that is, to create students who were both "red and expert"), during the late 1950s the implicit superiority of "redness" became clear. Schools engaged in teacher education favored political considerations in their practices and priorities. Like other educational institutions, they opened factories and sent faculty to labor in rural areas as ways of developing self-

reliance and breaking down divisions between mental and manual labor and between urban and rural areas.

But teacher education programs had a distinctive charter to attend to in their emphasis on moral and political commitments to socialism. In order to make possible the desired "cultural revolution," theorists argued, China's young generation had to be exposed to a thoroughly socialist education. Thus, the teachers and the schools producing them had to be scrutinized for their ideological correctness. This had curricular implications for teacher education. One example was the pruning of the curriculum, as evidenced, for instance, by the dropping of psychology as a field of study for prospective teachers because it was considered a bourgeois social science; another, was the incorporation of rural education teaching experiments. Following directives to take advantage of backwardness, to learn from the countryside, and to carry out experiments, teacher education institutions established rural teacher education stations and "teaching experiment regions."[20]

The Great Leap Forward's policies also brought with them the expansion and popularization of education at all levels. This heightened the existing problems of teacher shortage. The state tried in fast, economical ways to train more teachers. Spare-time, short-term, intensive teacher training programs flourished and added complexity to the teacher education system.

Retrenchment and Concern for Quality. The expansion of the late 1950s led to concerns in the 1960s about quality. During the early 1960s the heightened emphasis on quality favored reforms in technical training to the neglect of politics. One immediate curricular consequence for teacher education was decreased political and labor activity for the students and more time for academic study of their disciplines.

Perhaps the distinguishing feature of this period in teacher education was the emulation of comprehensive education. Reforms aimed at strengthening teacher education found expression in a 1960 Ministry of Education meeting on reform of teacher education. The view of that meeting, one which

was to have significant impact for years to come, was that teacher training colleges should "look to the comprehensive university" as a model. There was no clear agreement about what that should mean programmatically, but there was consensus that teacher training colleges should be comparable in their academic levels with comprehensive universities. To achieve that, many argued, the period of normal education had to be extended. The normal college curriculum of the day bore the stamp of this interest in academic work and research; a senior thesis requirement, for example, was introduced in some normal universities. The curricular practices of the 1960s revealed a distinct emphasis on the academic expansion of programs and a correspondingly diminished role for professional and vocational fare. By 1963 the Ministry of Education released a draft curriculum plan for normal colleges that eliminated pedagogy and psychology courses. The distinctive teacher education component of normal colleges remained only in the form of a few hours given to instruction in pedagogy, but the content lost its vitality. Professional education was minimized and made perfunctory.[21]

Radical Challenge: 1966–76. This orientation toward specialized disciplinary preparation for teachers was to change drastically with the Cultural Revolution. That period of history (1966–76) challenged all facets of Chinese society and education, and teacher education was not neglected as a target for attack. The sharpest critiques were of education's elitist tendencies—selectivity based on written exams, a curriculum too theoretically oriented to be connected to practical concerns, management by specialists, professional career paths, and so on.

This challenge profoundly shook teacher education. It was branded as a "product of capitalism."[22] Tainted by "bourgeois" practices and seriously criticized, the distinctly "normal" character of teacher education—the specialized teacher training, the professional field experience, and the study of education and psychology as disciplines—was abandoned. In individual exceptions, some schools maintained

in name a group of faculty responsible for education courses, but their teachers often actually were sent down to the countryside or changed teaching fields. In fact, in a number of cases colleges even changed their name to eliminate the "normal" or "teacher education" element.

The disruption went beyond the schools' missions and forms of identification. Large numbers of faculty were assigned to work for several years in rural areas to "learn from the peasants." Entire departments of education and psychology were closed. Schools opened or developed branch campuses in remote areas, and in some cases whole schools were moved from the city to the country.

In July 1971, the leaders—later known as the Gang of Four—blasted educators, educational work, and thus the foundation of teacher education with their "Two Assessments," which labeled all education in the first seventeen years of the PRC as bourgeois. This was tantamount to a rejection of all the theoretical basis and practical experience of normal colleges. The technocratic approach of the previous years was deemed not only inappropriate but wrong. There was no scientific basis for teacher education, except that which could be gleaned from practical experience in accord with strict adherence to Mao Ze-dong thought. Teachers were qualified to teach not from specialized preparation or knowledge of particular bodies of research but from political credentials and orthodoxy.

The Dominance of Technocratic Goals. The fall of the Gang of Four and a major redirection in national policy in 1978 brought changes that would once again affect the structure and content of teacher education. Three points about the 1978 shifts are significant: first, modernization became a national goal; second, education was consistently linked to it—education was to serve technocratic ends; third, the drive for modernization called for a new type of education. The sum of these has had important consequences for teacher education and its balancing of the technocratic and political

demands placed on it. This policy represents a renewal of old conflicts and the dominance of a technocratic ideology.

The dominance of this ideology is expressed in terms of efficiency, standards, and rational specialization and differentiation. We see these trends during the past decade in the institutionalized practices of teacher education: in an emphasis on the scientific basis and orientation of teacher education, in the concern for academic quality, in efforts to concentrate resources efficiently, and in explicit links between teacher education and economic development.

Discussions of teacher education in the years following 1978 have stressed the scientific nature of teacher education. This is expressed in attention to the need to plan, to train teachers scientifically, to prepare teachers to work with students in a period of technological revolution, and so on. First, pedagogy and psychology have been restored to the curriculum, and their scientific basis stressed. Second, the concern for academic quality is symbolized by the reestablishment of nationally standardized academic entrance exams for all higher education, including teacher education. Within teacher training colleges, concerns for academic quality have resulted in the restoration of a senior thesis requirement, greater standardization of curriculum objectives and plans, and the introduction of advanced-level courses and electives. The third aspect—the concentration of resources to promote efficiency—is exemplified by the 1987 division of teacher education (like the rest of higher education) into key and non-key institutions. The claim that concentrating talent and resources in key schools is essential to the efficient development of education was the official justification for this move. The establishment of a highly rationalized and differentiated system of in-service education is another example of efficiency-oriented reforms. The expansion of education colleges at different administrative levels, the growth of teacher refresher schools, and the articulation of these in-service provisions represent systematic changes made within the past decade. Finally, the interest in linking teacher education to broader economic

development saw the establishment of specialized teacher education institutions to prepare vocational school teachers.[23]

In short, the policies and practices of the most recent period in teacher education history present a sharper contrast to the patterns that preceded them than had occurred previously. In a near total repudiation of all teaching and teacher-training policies that existed during what is known now as the Gang of Four years, they represent the clearest expression of the dominance of technocratic concerns over egalitarian ones. But as the earlier description suggested, this imbalance has been evolving over a long history.

That history has been turbulent. Its dialectic of change has produced a system of teacher education that has been unable to develop coherent and consistent behavior and traditions. The position of institutions of teacher education was made worse by the fact that in each era teaching and teacher education became identified as a key, alternately, to technocratic or political ends. Shifts in the technocratic/political balance left institutions of teacher education vulnerable to criticism as being misguided, inappropriate, backward, or bourgeois. Over decades, these institutions—already hindered by low prestige—grew weaker in social, financial, and academic standing. That situation has resulted in teacher education being objectively inferior in funding, facilities, faculty, and students to other types of professional and university education. In the 1980s, when academic quality and technical expertise have reigned supreme as standards, and students are encouraged to make rational decisions about their future, teacher education is in an even less attractive and more difficult light.

The turbulence of teacher education's political environment has produced institutional weakness that, added to the national and educational context described earlier, results in teacher education's institutional specialization and isolation; a shortage of resources; ambiguity of purpose; and problems of recruitment, standards, and retention. These may be seen as constraints that continue to exert a powerful influence.

Assumptions About Teachers, Teaching, and Teacher Education

Equally important to the constraining influence of context and history, however, are assumptions about teaching and teachers. These have their roots in a long cultural history, though the politics and social organization of the past forty years have strengthened their hold. Their impact on the structure and content of teacher education is clear. I will briefly outline a widely shared cultural vision of the ideal teacher, then consider the ways in which assumptions embedded in this vision are expressed and shape the practice of teacher education.

The traditional ideal for a teacher is that of a master or a virtuoso. In China the ideal teacher is one who is steeped in textual knowledge and can transmit that knowledge to students in efficient, artful ways that render it understandable.[24] The ideal teacher is at the same time expert in the technical understanding of text and an exemplar in social and political life. The teacher in China, both in its Confucian past and its socialist present, has been able to combine academic mastery and moral suasion.

At the 1980 National Conference on Teacher Education, the Ministry of Education (MOE) laid out official guidelines for teachers and teacher education in saying that teachers need to have undergone rigorous preparation and must be able to meet three standards: "1. to possess relatively broad and deep knowledge and modern scientific knowledge; 2. to have grasped the science of education and understood educational laws; and 3. to have high moral character and lofty spiritual realm."[25] More recently, goals for teachers and teacher education have added expectations for an affective dimension to the academic, professional, and moral competence most frequently stressed; the 1980s campaign to "respect teachers, love students" has highlighted the traditional vision of teachers as people responsible for nurturing the holistic development of students.[26] In short, teacher education today is expected to provide preparation in or

to reinforce subject matter competence, pedagogical understanding, moral character, and affective skills.

These four goals are not evenly represented in the attention and resources given them by teacher education, nor are they equally present across the range of pre-service and in-service teacher education. In both pre-service and in-service programs, subject matter competence dominates in the formal charter and actual practice of teacher education institutions. At the pre-service level, pedagogy, morals, and affect are also attended to (whereas in in-service education they are virtually ignored in formal programs), but these more often occur in brief and unconnected course work, in the extracurricular life of the normal institution, or in the practica.

Despite the unevenness in attention to individual goals, the organization and content of pre-service and in-service education foster these goals and the vision of teaching they support. In the discussion that follows, I examine how the activities of pre-service education work toward achieving these goals in ways that reinforce traditional assumptions of teachers as masters and then consider how the arrangement of in-service education further bolsters these assumptions.

Pre-service Teacher Education. The ideal of the teacher as virtuoso entails several key assumptions about teaching, learning, students, and knowledge. These assumptions have programmatic expression in the organization and content of pre-service teacher education.[27]

The dominant view of teaching in China holds that *the central aim of teaching is to convey knowledge to students. Knowledge is found in texts, to be transmitted rather than constructed.* Despite official rhetoric and educational support for a more constructivist, problem-posing view of education, this approach dominates.[28] Subject matter knowledge occupies a major place both in conceptions of the knowledge that teachers work with and in a conception of the education teachers themselves need.

Thus, for preparation to teach in secondary schools, prospective teachers enter their first year of college in either

a two- or three-year *zhuanke* program—for what we might call an associate of arts degree (A.A.)—or a four-year bachelor of arts degree (B.A.) program as majors in a subject area that corresponds to the secondary school curriculum. Although percentages vary slightly by department and institution, courses in the students' own field (including required courses, which continue to constitute the majority, and electives) account for approximately 60% to 70% of a B.A. program and approximately 75% of a two- or three-year A.A. program.[29] Secondary level normal schools, which prepare elementary teachers, require broader course work than do the more specialized programs for junior and senior high school teaching preparation. Nevertheless, course work in subject areas corresponding to the elementary school curriculum, as opposed to course work in education, psychology or politics, predominates: 39% of a student's course hours is taken up with the study of language and mathematics and approximately 56% of total course time goes to the study of these subjects and science, history and geography.[30] In sum, regardless of the institutional level, the content of teacher education is dominated by preparation in subject matter knowledge.

An important corollary to the dominance of subject matter knowledge in the conception of teaching is the proportionally small role for professional education course work (typically three courses—pedagogy, psychology, and methods) and practica. In the tertiary-level normal programs, education course work occupies approximately 5% of the total hours of a student's B.A. program. In the A.A. programs, although there is greater variation—depending on the major and the length of the A.A. program—similar patterns are present. Education and psychology represent approximately 5% of a three-year A.A. program and 7% to 8% of a two-year one. Methods course work, typically a one-semester course offered within the major department, takes an average of 3.9% of a student's course work (ranging from 1.3% to 13.9% of total course hours for ten majors in two- and three-year programs). Practica likewise are restricted in a student's program.

In teacher-training colleges, student teaching occurs at the end of a student's program and typically takes four to six weeks for A.A. students and approximately six weeks for B.A. candidates. At the teacher-training school slightly more time (a total of eight to ten weeks) is devoted to practica, which occur over the students' second, third, and fourth years.[31] While much debate continues over the relative benefits of the professional education core courses and practica, the formal attention given to these approaches to knowledge and occasions for learning is relatively small.[32]

Related to the first assumption about the central role of knowledge to teaching is a second assumption that assumes *knowledge resides in texts and is best learned through immersion in the text.* Thus, teacher education devotes the majority of a student's time to studying and reviewing texts. Even in the field, the assumption that knowing and transmitting the text are learning goals shapes the learning experience. Observations of student teaching in China reveal practices that reflect and reinforce this perspective.[33] Student teachers are required to teach very few lessons during their practica, often only four to six total over six weeks. Yet those they teach require careful scripting, much private rehearsal, and a public rehearsal in a "trial lesson" before peers and mentors in advance of teaching the lesson in the actual classroom. The student teaching experience is structured to allow students maximum time to acquaint themselves with the text before they teach it. Given this framework there is little motivation or leeway for deviation from the assigned text of the lesson. (Classroom teachers do not choose their texts, since the assigned curriculum presents a set canon of knowledge the teacher is to convey.)

A third assumption about teaching and learning has similarly significant consequences for time allocation and the content of teacher education course work and field experience. This is the assumption that *students are more alike than different.* Learning is a group activity, assumed to take place in roughly similar styles and paces for all students. In teacher education, the organization of courses and practica

reveals this assumption. Required courses are the norm in teacher education.[34] Student teaching is also structured on the assumption of collective similarity: students work in groups in schools, observe each other's teaching, and often work together to prepare lessons. As for discussion of differences, in the content of the program of prospective teachers there is virtually no attention given to student differences, individualized instruction, or other topics so popular in a U.S. setting influenced by cultural assumptions about the salience and significance of individual differences. In the required semester-long pedagogy course at normal universities, typically only one section of one chapter of the text (or a couple of lectures) treats topics related to individual differences. Part of this emphasis on fundamental similarity is rooted in the recent political tradition of egalitarianism and the notion that all students can learn, but this socialist belief in educability is partially congruent with, and reinforced by, powerful Confucian beliefs about the malleability of humans.[35] Related to this belief is the assumption that similarities among learners are more important than differences.

This traditional assumption about human malleability has supported a view of teachers as moral exemplars. Traditionally in Confucian China and today in a socialist context *teaching is understood as a moral act*. This approach has implications for several aspects of teacher education: selection, course work and extracurricular guidance, and the content of field experience. Like all secondary and tertiary school students, teacher education students are formally admitted to their teacher education programs through written examinations of key subjects. Yet teacher education candidates must also pass more scrutiny of their character than do those seeking different training. Interviews, school records, and other indicators are studied, even if only secondarily, to consider the suitability of the candidates in terms of their moral, social, and political behavior. Researchers argue that "professional thinking and teaching ethics do not develop out of thin air or in a single act or moment. Rather they

require specialized training to be realized"[36]; and the course work and extracurricular life of the teacher education institution is organized to reinforce students' ethical growth. Once enrolled, students take moral education courses as well as a politics core course sequence, and in their extracurricular life they are monitored or shepherded by counselors (called *fudaoyuan*).

Students' field experiences also include activity to reinforce the moral dimension, as all student teachers are required to work for one week as the class advisor to an entire class, typically about fifty children. As the advisor, a student teacher takes responsibility for the social, psychological, and ideological welfare and growth of the class, and must organize and lead extracurricular activities, monitor students' academic performance and school behavior, and conduct ideological education. This experience is viewed by teacher educators and student teachers alike as an important and demanding one that introduces prospective teachers to a major facet of their future role.

The experience as class advisor and the larger experience of student teaching reinforce the significance given to the affective dimension of teaching. It is assumed that, in addition to the other competencies, *teaching involves emotion.* Teachers must care for, love, and develop some affective bonds with their students. While much of the talk in professional education courses implies this, the message is often explicitly structured into activities surrounding student teaching—as in orientation sessions where experienced teachers described their approaches to teaching.

Finally, a sixth popular assumption about teaching has noteworthy implications for pre-service and in-service education and their articulation. This is the view that *teaching is both a science and an art.* The curriculum of teacher education at the pre-service level emphasizes the scientific dimensions: a technical mastery of textual knowledge and a familiarity with what are viewed as educational laws (what we might call principles). But beginning with the capstone pre-service experience—student teaching—and then in in-

service teacher education, emphasis is placed on teaching as art. It is assumed that art requires mastery of basic skills gained through repetition and rehearsal; it is expected that the novice learns best from observing and being critiqued by a practicing, veteran artist.

Thus, student teaching is organized to allow for rehearsal, observation of mentors, and critique by mentors and peers. There is little of the "sink or swim" mentality prevalent in U.S. student teaching. Rather, students spend the majority of their time observing mentors, teaching, and rehearsing their own performances.

In-service Teacher Education. This pattern continues and in fact shapes much of the in-service teacher education that occurs within schools. While 216 education colleges and institutes and 2,099 teacher refresher schools exist as in-service teacher education institutions to assist teachers in their subject-matter preparation, perhaps the most distinctive and most widespread form of in-service teacher education in China exists in the mentor and peer support structures and demonstration activities organized within individual schools. Teachers in secondary schools, for example, are organized in work groups. Traditionally they are arranged according to their subject area, but in more recent years organization is sometimes along grade-level lines. The relatively light teaching load (often between 6 and 12 periods a week) and the practice of devoting periodic time during the school week for in-service education allow these groups to be actively engaged in support and staff development. Interviews with school administrators and teachers indicate a common pattern of work groups being heterogeneously mixed according to years of teaching experience in the hope of "the old bringing along the young." A work group prepares lesson plans together and observes and critiques each other's teaching. In recent years in elite or key schools, these groups have even engaged in research that they disseminate among colleagues. Demonstration classes are held for faculty from within and from outside the school so that teachers can learn

from the practice of distinguished teachers. Here, as in the pre-service student teaching, the assumption is that teaching improves through emulation of models.

This view characterizes in-service teacher education in its other institutional forms as well. Today, as the need for "upgrading" teachers increases and in-service teacher education expands, a wider array of teacher education programs are found. But whether expansion be in the nationally produced television teacher education, in the central government-sponsored Teacher Corps established in 1985, in teacher education sections of popular education journals, or in the range of formal education colleges and teacher refresher schools, the expectation is that practicing teachers learn through emulation of models.[37] Most often the model is distinguished by his or her deep knowledge of subject matter. Hence, for example, teacher educators in the education colleges tend to be subject matter specialists and are often themselves former teachers.

To review, then, we see that the content and organizational arrangements of both pre-service and in-service teacher education reflect and reinforce widely shared, established assumptions about teaching and learning. A vision of the teacher as a master transmitter of knowledge dominates the practice of teacher education, and that practice is guided by an understanding of teaching as science and art.

Conclusion: Looking Ahead

Teacher education in China today is shaped by this long history of assumptions about teaching and teachers, yet it faces tremendous pressures to change. The national and educational contexts in which it operates both exacerbate its historical weaknesses and challenge it to produce more and better qualified teachers with a view of teaching, learning, knowledge, and society that is congruent with the goals of China's socialist modernization. This challenge has brought teacher education greater public and official attention than it has had. Debates rage. They have focused on fundamental

issues—the importance of the teacher, the distinctive character of teacher education and its programmatic expression. Yet, while debates continue in the academic press and among teacher educators, significant structural change has already begun. Changing external conditions—mobility in the labor market and society, the increasing autonomy of higher education, and the restructuring of the secondary education system—have already prompted teacher education institutions to reform. How will teacher education change? How is it likely to respond to this powerful moment of rapid social, political, and economic change?

We know that recent years have brought the expansion of in-service teacher education and increased differentiation within pre-service teacher education. But it is not easy to predict teacher education's next steps. History tells us that China's teacher education has been in a dialectical process of change since its inception, with much of that change shaped by broader political and social debates about the relative importance of the technical and moral dimensions of political and social life. It appears inevitable that China's current struggle to redress the balance of these domains will affect teacher education. We see already a proliferation of certification activity, accountability schemes, and technical standards. The dominance of technocratic goals has its effect structurally. Yet it also seems certain that, given the powerful influence of cultural norms, the content of teacher education may not change as much as will surface structures.

This chapter began with the claim that teacher education in China, at least structurally, resembles teacher education elsewhere. The current technocratic orientation is making the structures increasingly similar to those of other countries. In fact, there is explicit study and adoption of foreign approaches. What is being produced is a system of teacher education that is rational, hierarchical, stratified internally and within the system of higher education, and increasingly focused on credentials. Despite this pattern of convergence, however, China's history and its cultural traditions give a distinctive cast to the actual practice of teacher education. It is an essentially conservative practice, oriented toward

reproducing teacher styles and knowledge of canonical texts. As China's leaders themselves agree, in order for the espoused educational reform and national development to evolve, the practices of teacher education will have to change. Herein lies the greatest challenge for China's teacher education.

Endnotes

1. In the 1980s the scale of the target has been tremendous. In 1987 China had 8.7 million elementary and secondary teachers, and estimates are that approximately 70% of secondary teachers and 37% of elementary teachers are unqualified in terms of degrees (Guojia Jiaoyu Weiyuanhui Jihua Caiwuju, *Zhongguo Jiaoyu Tongji Nianjian 1987* [China Education Statistical Yearbook 1987] (Beijing: Beijing Gongye Daxue Chubanshe, 1988), 5; *Zhongguo Jiaoyubao* [China Education News], 6 August 1987 and 20 August 1987). Even greater numbers of teachers are described as needing in-service education when teaching performance rather than degrees is used as a measure of qualifications.

2. Huazhong Shifan Xueyuan Jiaoyuxi, Henan Shifan Daxue Jiaoyuxi, Gansu Shifan Daxue Jiaoyuxi, Hunan Shifan Xueyuan Jiaoyuxi, Wuhan Shifan Xueyuan Jiaoyu Jiaoyanshi, *Jiaoyuxue* [Pedagogy] (Beijing: Renmin Jiaoyu Chubanshe, 1980), 319.

3. Yuan Liansheng, "Lun Woguo Jiaoyu Jingji Kuique" [On the Shortage of China's Educational Funds], *Jiaoyu Yanjiu* (7) (1988): 23–26, 31.

4. The official announcement of the wage increase came in late 1987 and was moving toward implementation in sixteen provinces, autonomous regions, and municipalities in 1988 ("Government to Increase Teachers' Wages," *Daily Report*, 1 December 1987, 20–21; *Zhongguo Jiaoyubao*, 3 December 1987, 1, and 7 July 1988, 1). But inflation during this time continued to rise. Recent government estimates of 17% inflation in the ten months prior to October 1988 are commonly presumed to be low, but even the government predicts inflation will top 20% by the end of 1988 ("Li Warns of 'Many Difficulties'," *Daily Report*, 29 November 1988, 24.

5. Despite recent policies to improve the treatment of intellectuals, teachers in the 1980s continue to experience difficulties. There are reports of harassment, beatings, and murder. See, for example, *Renmin Ribao* [People's Daily], 31 May 1984; Zhongguo Jiaoyu Nianjian Bianjibu, *Zhongguo Jiaoyu Nianjian 1982–1984* [China Education Yearbook 1982–1984] (Changsha: Hunan Jiaoyu Chubanshe, 1986), 351; *Zhongguo Jiaoyubao*, 24 October 1987, 1, and 19 April 1988, 1.

6. Lynn Paine, "Reform and Balance in Chinese Teacher Education," unpublished PhD dissertation, Stanford University, 1986; and Zhuang Mingshui, "Gaoshi Xuesheng Zhuanye Sixiang Jiaoyu Cuyi" [Some Comments on the

Education of Teacher Training College Students' Professional Thinking] *Fujian Shida Xuebao* (1) Part 2 (1983): 55–62.

7. The State Education Commission's (formerly the Ministry of Education) vice-commissioner Liu Bin argues that in recent years there has actually been a decrease in the ratio of teacher training college graduates entering pre-collegiate teaching, with some schools managing to send 50% of their graduates to high school posts and others only sending a few percent (Liu Bin, "Jiaqiang Hongguan Guanli Tigao Jiaoyu Zhiliang" [Strengthen Macro Management, Raise the Quality of Education] *Renmin Jiaoyu* (1) (1986): 5–8.

8. Harry Judge, *American Graduate Schools of Education: A View from Abroad*, A Report to the Ford Foundation (New York: Ford Foundation, 1982).

9. For example, China's 260 teacher training colleges in 1987 (73 of which were four-year colleges) account for 24.1% of the students enrolled in higher education. Yet only 2 teacher training colleges have been designated by the state to be among the nearly 100 key colleges and universities that receive proportionately greater financial support and stronger faculty and students, *Nianjian 1987*, 22–24; Jurgen Henze, "Higher Education: The Tension Between Quality and Equality," in *Contemporary Chinese Education*, ed. Ruth Hayhoe (Armonk, New York: M.E. Sharpe, 1984), 124–25).

10. *Nianjian 1987*, 5.

11. Gao Yi, "Banhao Shifan Jiaoyu" [Run Teacher Education Well], *Jiaoyu Yanjiu* (4) (1980): 6–12. Given the shortage, comprehensive universities and science and engineering colleges are now being asked to help prepare teachers. Gu Mingyuan, "China's Education Heads for the Year 2000: On Educational Reform in China," *Canadian and International Education*, 16 (1) (1987): 84.

12. Zhonghua Renmin Gongheguo Jiaoyubu Jihua Caiwusi, *Zhongguo Jiaoyu Chengjiu 1949–1983* [Achievement of Education in China 1949–1983] (Beijing: Renmin Jiaoyu Chubanshe, 1984): 22–23, 55, 151.

13. *Zhongguo Jiaoyubao*, 23 November 1985, 1.

14. "Wan Li Speech," *Daily Report*, 20 May 1985, K3.

15. The Chinese text appears as "Zhongguo Zhongyang Guanyu Jiaoyu Tizhi Gaige de Jueding" [The CPC Central Committee Decision on Reform of the Educational System], in *Jiaoyu Zhongyao Wenxian Xuanbian* (Beijing: Renmin Jiaoyu Chubanshe, 1986), 15–28. It is available in translation in "CPC Decision on Educational Reform Publicized," *Daily Report*, 30 May 1985, K1-11.

16. For more on this, see *Zhongguo Jiaoyubao*, 9 July 1987, 2 December 1987 and 26 December 1987, 1; and "State Circular on Teacher Qualifications," *Daily Report*, 29 December 1987, 43.

17. The expression "red and expert"—used since Liberation—refers to a goal of socialist China's education. It is held that all education should train young people to be both politically committed ("red") and technically proficient

("expert"). The goal has remained a fundamental principle of Chinese education for decades, but its salience and the interpretations of the best way to balance these two elements have varied significantly over time.

18. Sally Borthwick, *Education and Social Change in China: The Beginning of the Modern Era* (Stanford, California: Hoover Institution Press, 1983).

19. Cui Yangshu, "Tuchu Shifan Jiaoyu Tedian, Tigao Shifan Jiaoyu Zhiliang" [Make Prominent the Special Characteristics of Teacher Education and Improve the Quality of Teacher Education], in *Banhao Shifan Jiaoyu Fazhan Jiaoyu Kexue* (Beijing: Renmin Jiaoyu Chubanshe, 1979), 28–40; *Renmin Ribao*, 23 October 1953, 1, 4.

20. *Guangming Ribao* [Guangming Daily], 23 February 1958.

21. Wu Dingchu, "Zhongguo Jinxiandai Shifan Jiaoyu Dashi Nianbiao" [A Yearly Review of Major Events in Modern and Contemporary Teacher Education], *Kunming Shifan Xuebao* (1) (1983): 76–83; Chen Rangsheng, "Woguo Shifan Jiaoyu Wenti Yanjiu Jinkuang" [Recent Developments in Research on our Country's Teacher Education Problems] *Fujian Shida Xuebao* (3) (1983): 98–103; Xu Yangben, "Mingque Renwu, Zongjie Jingyan, Banhao Gaodeng Shifan Jiaoyu" [Clarify the Mission, Sum Up Experience and Run Tertiary Teacher Education Well], in *Banhao Shifan Jiaoyu*, 41–51.

22. Ying Shichun, "Shifan Jiaoyu de Diwei he Zuoyong" [The Role and Position of Teacher Education], in *Banhao Shifan Jiaoyu*, 13–27.

23. For more discussion of the impact of post-Mao reforms on teacher education, see Paine, *Reform and Balance*, 1986.

24. Even today, with the pressure for students' examination performance often guiding popular criteria for the good teacher, the model holds.

25. "Jiaoyubu Guanyu Shifan Jiaoyu De Jige Wenti De Qingshi Baogao, 1980" [Report of the Ministry of Education on Several Problems in Teacher Education, 1980], in *Dangdai Zhongguo Gaodeng Shifan Jiaoyu Ziliaoxuan*, vol. 1, ed. Dangdai Zhongguo, *Congshu Jiaoyujuan Bianjishi* (Shanghai: Huadong Shifan Daxue Chubanshe, 1986), 215.

26. Lo describes the four criteria for teachers as laid out in a MOE document on "Temporary Regulations for Full-time Secondary Schools" as "the ability to teach academic subjects well," "love for students," "willingness to be an exemplar," and "professional competence"; Billie L. C. Lo, "Teacher Education in the Eighties, in *Contemporary Chinese Education*, ed. Ruth Hayhoe (Armonk, New York: M.E. Sharpe, 1984), 156–57. The campaign is discussed in Zhongguo Jiaoyu Nianjian Bianjibu, *Zhongguo Jiaoyu Nianjian 1949–1981* [Annual Review of Chinese Education, 1949–1981] (Beijing: Zhongguo Dabaike Quanshu Chubanshe, 1984), 200; and John Cleverley, *The Schooling of China* (Boston: George Allen and Unwin, 1985), 225–27.

27. What follows are descriptions and interpretations of behavior and practices in teacher education. Though official rhetoric about teacher education does not always support these claims, I have chosen to ground my analysis in examination of actual practice and professional discourse.

28. See, for example, the essays in Zhongguo Jiaoyuxuehui and Zhongyang Jiaoyu Kexue Yanjiusuo, *Sange Mianxiang* [Facing Three Issues] (Beijing: Jiaoyu Kexue Chubanshe, 1984).

29. Based on Dongbei Shifan Daxue Jiaowuchu, *Dongbei Shifan Daxue Jiaoxue Zhidaoshu (Benke)* [Northeast Normal University Teaching Guide (Undergraduate Program)], 1985, 9; and MOE draft plans in "Guanyu Shixing Gaodeng Shifan Yuanxiao Wenke Sange Zhuanye Jiaoxue Jihua De Tongzhi" [Notice on Implementing Teaching Plans in Three Arts and Humanities Fields in Tertiary Teacher Training Colleges], in *Dangdai Zhongguo*, 802; "Guanyu Shixing Gaodeng Shifan Yuanxiao Like Wuge Zhuanye Jiaoxue Jihua De Tongzhi" [Notice on Implementing Teaching Plans in Five Science Fields in Tertiary Teacher Training Colleges], in *Dangdai Zhongguo*, 781-795; "Zhuanke Shige Zhuanye Jiaoxue Jihua" [Teaching Plans for Ten Fields in *Zhuanke* Teacher Training Colleges], in *Dangdai Zhongguo*, 820–909. All subsequent references to allocation of course time in tertiary teacher education (for either the B.A. or A.A. degree) come from these sources in *Dangdai Zhongguo* unless otherwise noted.

30. Wang Congfang, "Pre-Service and In-Service Teacher Education in China," *Canadian and International Education* 16 (1) (1987): 135; Lo, "Teacher Education," 164.

31. Wang, "Pre-Service," 136; Lo, "Teacher Education," 164.

32. See, for example, the essays in *Banhao Shifan Jiaoyu*, and Chen Jianhui, "Shilun Shifan Jiaoyu Zhuanye Shunlian Wenti" [A Discussion of Professional Training in Teacher Education], *Shifan Jiaoyu Yanjiu* (2) (1984): 35–40; Huang Yongyan, *Zhongdeng Shifan Jiaoyu Shixi Shouce* [Handbook for Teacher Training School Student Teaching] (Beijing: Renmin Jiaoyu Chubanshe, 1984); Su Weichang, "Tan Jiaoyu Zhuanyeke Zai Shifan Jiaoyuzhong De Diwei" [Speaking about the Place of Professional Education Courses in Teacher Education], *Jinzhou Shifan Xueyuan Xuebao* (2) (1982): 13–18; Xu Ju, "Bixu Qieshi Jiaqiang Bing Gaige Jiaoyu Shixi" [We Must Strengthen and Reform Student Teaching], *Kecheng, Jiaocai, Jiaofa* (2) (1984): 41–43.

33. Lynn Paine, "Teaching as a Virtuoso Performance: The Model and Its Consequences for Teaching Thinking and Preparation in China," in *Teacher Thinking and Professional Action*, ed. Joost Lowyck, Rob Halkes, and Christopher Clark (forthcoming).

34. Of course other factors also contribute to this, including resource shortages, political and cultural norms of orthodoxy, and the influence of Soviet educational models. As in the subsequent discussion of the moral curriculum of teacher education, my description here portrays common patterns of the late 1970s and early and mid-1980s. Given the major reforms of higher education initiated by the 1985 Reform Decision, the late 1980s are witnessing greater institutional autonomy in higher education, and some of these curricular patterns that I am describing appear to be changing slightly at some individual institutions, although the direction and extent of that change is not yet clear.

35. For examples of texts, see *Jiaoyuxue*. For more on the topic of malleability, see two books by Donald Munro: *The Concept of Man in Early China* (Stanford, California: Stanford University Press, 1969) and *The Concept of Man in Contemporary China* (Ann Arbor, Michigan: University of Michigan Press, 1977).

36. Chen Jianhui, "Shilan, Shifan," 37.

37. The Teacher Corps was established in 1985 by the central government and includes thousands of government workers who have been assigned to work around the country, assisting local educational authorities in teacher education (Wang, "Pre-Service," 139).

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